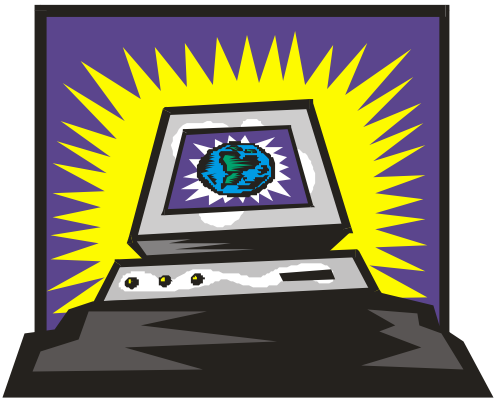

Mapping Skills Tutorial

Mandy deBelin

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Introduction

Welcome to the Mapping Skills tutorial. This tutorial covers two software packages that can help you produce professional quality maps for your documents.

The first part of the tutorial introduces you to CorelDRAW, and guides you through the exercise of creating a map.

The second part of the tutorial introduces you to GenMap, and guides you through the process of creating two maps that show off different features of GenMap.

The tutorial gives you experience of the basic use of these tools. Just work your way through it and you'll be surprised what you pick up.

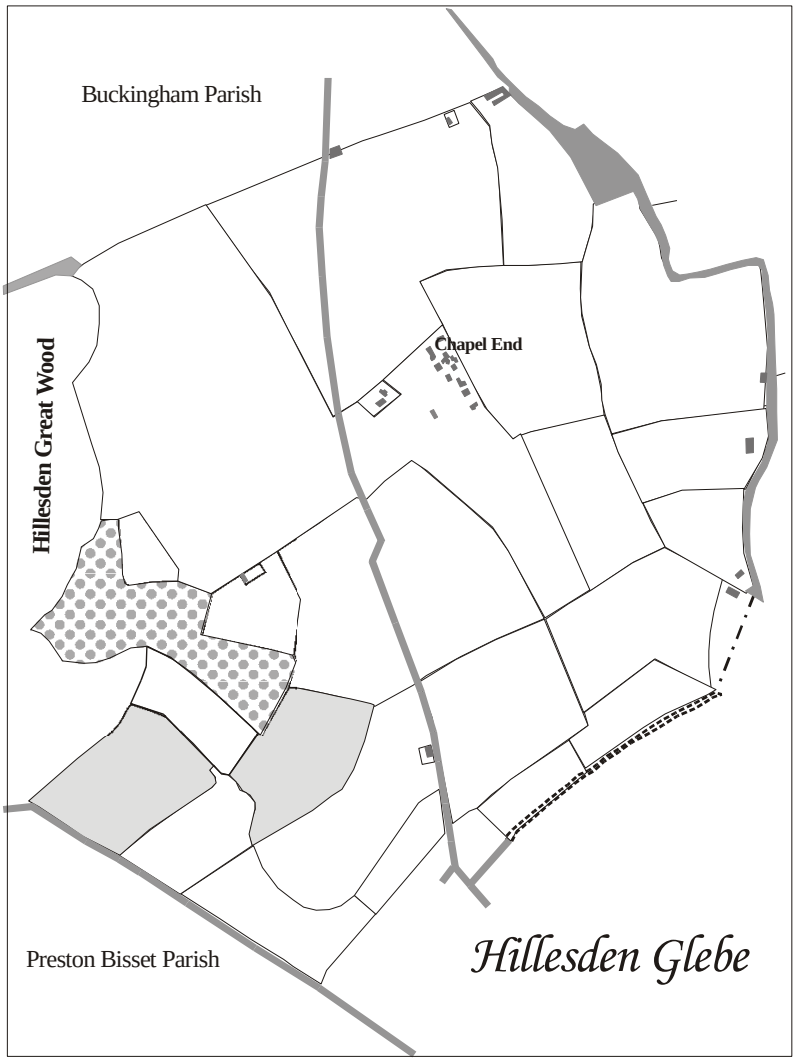
The tutorial is not intended to act as a User Guide for either package. Both come with extensive on-line help that should be able to help you explore all the other functionality that is on offer.

CorelDRAW

The aim of this section is to introduce you to using CorelDRAW, a powerful graphics tool that can help you produce professional-looking maps. CorelDRAW 9 is available on the University network and can be accessed from any of the PCs around Marc Fitch House. You can also currently purchase CorelDRAW 9 (packaged as 'CorelDRAW Essentials') for around £40.00.

The tutorial assumes you have basic computer skills! We will walk you through the production of a simple map; all you need is supplied on the tutorial floppy disk.

This is what the finished map will look like:



CorelDRAW Basic Concepts

Like any PC package, CorelDRAW offers many ways of achieving the same thing (via main menu, toolbar, shortcut menu etc.). We will show you one way, when you're confident you can explore and choose the methods which best suit you.

CorelDRAW is what is known as an 'object' or 'vector' graphics editor. It allows you to draw lines, circles, squares, polygons and freehand shapes. You can fill shapes with different colours and textures. You can import pictures from other packages or from the web and include them in your illustrations. You can include text in almost endless different fonts.

Once finished, you can print your illustration directly, or you can place it in a Microsoft Word, or other word processor, document.

Layers

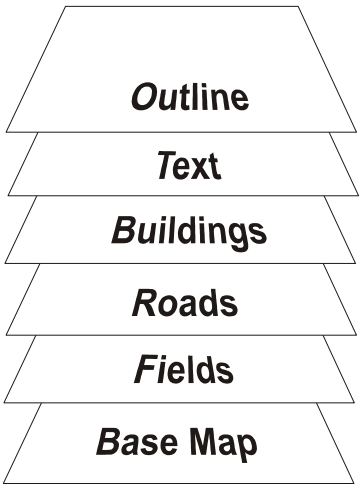
One of the most important concepts to master in CorelDRAW is layers. Think of layers as acetate sheets. You can draw on each one separately, but when placed on top of each other you see the whole image. Using layers enables you to:

- Trace over images you have imported.
- Keep different information separately (for example, you can keep text on a separate layer).
- Choose whether to view all layers.
- Choose whether to print all layers.
- Produce different 'versions' of an illustration from the same 'master'.

The map we are going to produce has six layers:

- one for an imported source map we are going to trace (this is hidden once our map is finished)
- one for the field boundaries
- one for roads and tracks
- one for buildings

- one for text
- one for the outline round the map

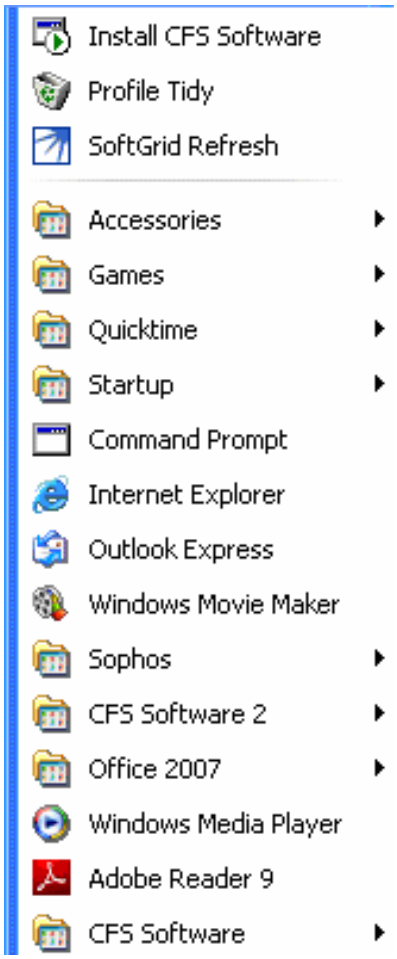


Installing CorelDRAW

The first thing you need to do is log on to one of the PCs around the University. You then need to install CorelDRAW9. Once you have done this CorelDRAW will be available for you to use whenever and wherever you log in.

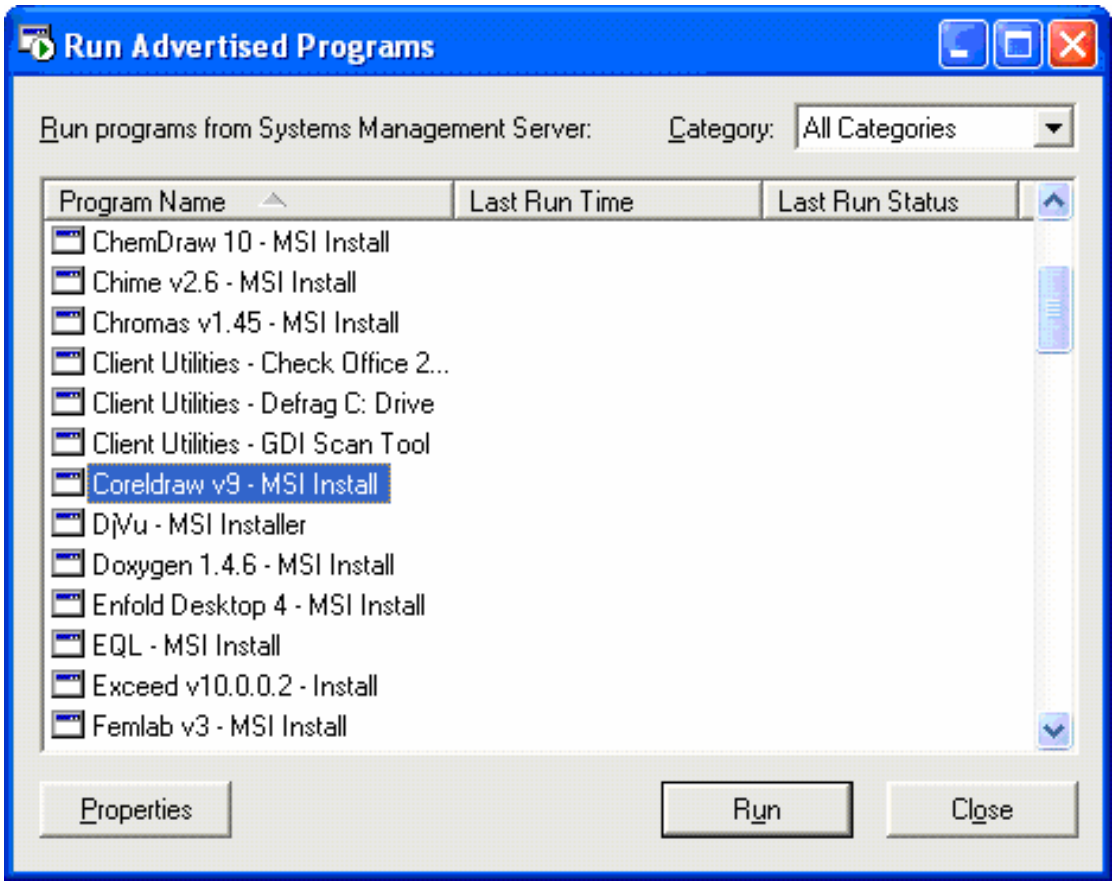
To install CorelDRAW:

1. From the Start Menu, choose **Start ►All Programs ► Install CFS Software**.



2. The Advertised Programs wizard will appear.

3. Click on the CorelDraw v9 option:

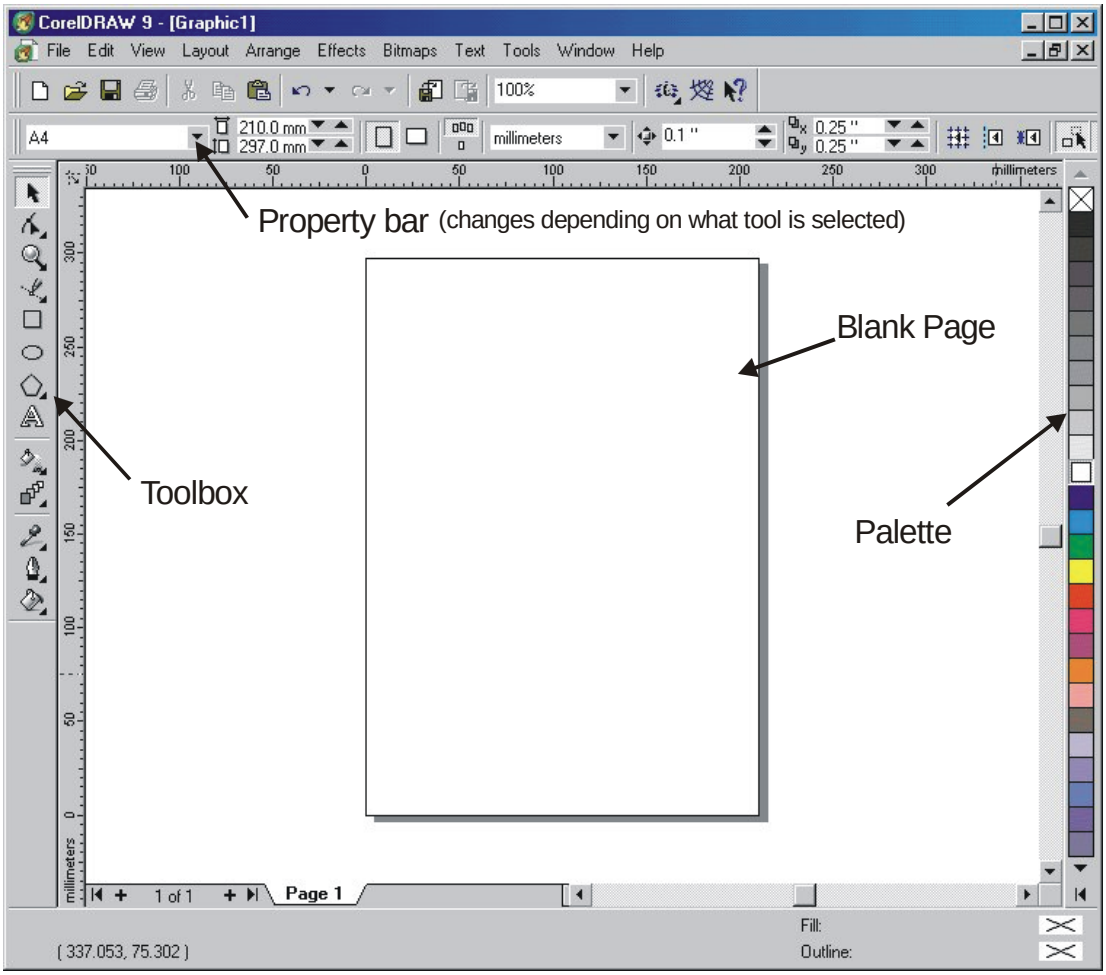


4. Click Next, and continue to click Next at all the wizard screens until it reports successful completion (this can take some time). If you encounter any problems contact the computer centre helpdesk (ext. 2253, ithelp@le.ac.uk)

Start CorelDRAW by choosing **Start ► Programs ► CorelDRAW9 ► CorelDRAW9**. CorelDRAW starts. A window offers you a choice of actions. Choose New Graphic.

Quick Tour of CorelDRAW

This what CorelDRAW looks like the first time you open a new graphic in it:

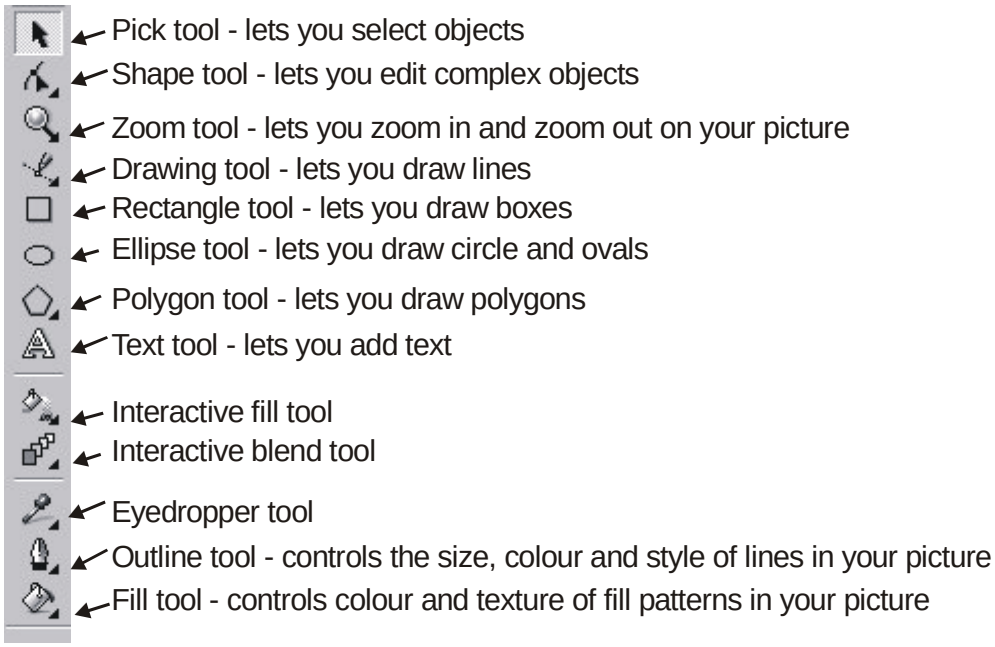


Blank Page

The blank page outline represents the area that will appear if you choose to print your illustration. You can draw anywhere in the window, but only objects on the page will be printed.

Toolbox

The toolbox is central to using CorelDRAW. Each icon represents a tool that lets you add an object to your drawing or change the appearance of one already drawn. Here are the tools:



Sometimes there is more than one type of the same tool. If you click on the small arrow in the bottom right hand corner of the tool a further palette flies out letting you pick the type you want. For example, there are different types of drawing tool; you will be using the Bezier tool:

The tools that you will be using most in this tutorial are:

- **Bezier drawing tool**. This is the tool you will be using to draw your field boundaries, roads and other features on your map.
- **Shape tool**. You use this for fine editing of shapes and lines you've created.

- **Text tool**. This lets you add text to your map.
- **Pick tool**. This lets you select objects in your drawing for adjustment and editing.
- **Outline tool**. This lets you specify what the lines in your drawing look like – how thick they are, what colour, whether they are solid or dotted or have arrow heads.
- **Fill tool**. This lets you fill objects in your drawing, for example adding shading to fields.
- **Zoom tool**. You will need to use this all the time to zoom in on objects so you can clearly see what you are editing, and to zoom out again to get an overall impression.

Property bars

Some tools have an associated property bar that appears when you select the tool. These enable you to set tool characteristics. As an example, here is the property bar for the text tool:

This lets you select the type of font and its size as well as other characteristics such as weight, angle, underlining etc.

Palette

The palette provides a quick way for you to fill shapes you have drawn with a colour. Just click on the shape with the pick tool, and then click on the chosen fill colour in the palette.

Drawing the Map

Having installed CorelDRAW and become familiar with its basic features, you are now ready to start drawing your map. The process is divided into the following steps:

1. Set up the layers in your drawing.
2. Import the original map on which the exercise is based.
3. Draw the field outlines, and fill with colours and textures as required.

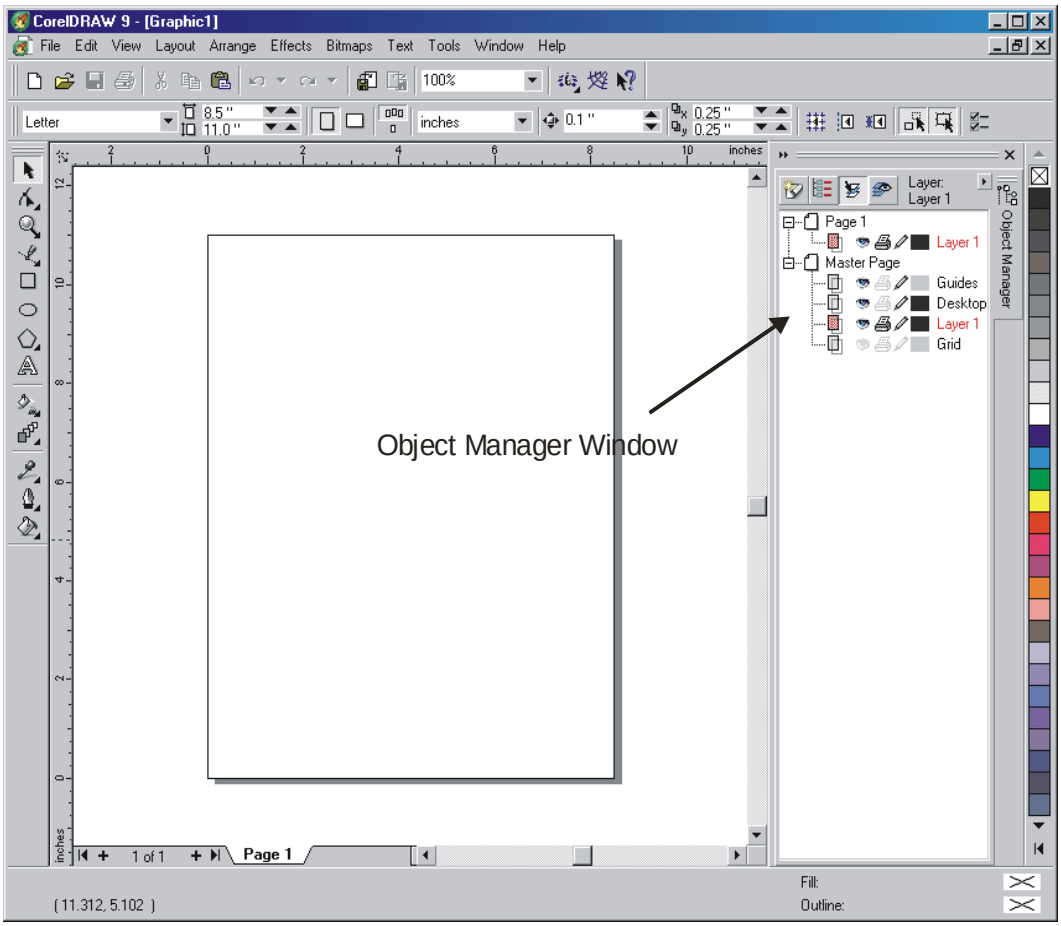
4. Draw in the roads and tracks.
5. Add the buildings.
6. Insert the text.
7. Finally, finish off the map with a bounding box.

If you haven't already opened a new Corel drawing, open one now. Save it into a tutorial folder with a recognizable name. The file will have the suffix .CDR. SAVE YOUR FILE OFTEN. The quickest way to do this is to press CTRL-S.

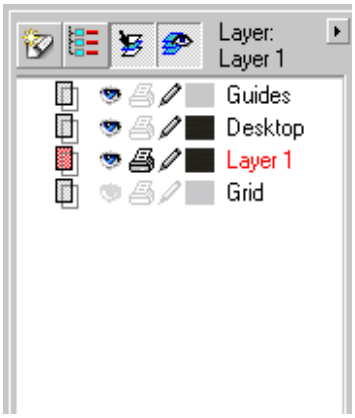
Set up the Layers

To work with layers in your drawing you need to open the Object Manager:

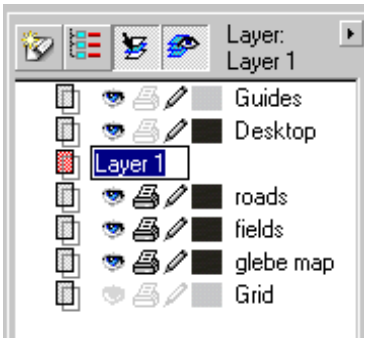
- Select **Tools ► Object Manager…** .The **Object Manager** window appears to the left of your drawing:



- Click the eye icon in the Object Manager tool bar to restrict the view to layer details (we won't be using multiple pages):



- Click the add layer icon five times to add five new layers. As you add each one, give it a name by typing into the bounding box; name them 'fields', 'roads', 'buildings', 'text' and 'outline'. Rename Layer 1 by right-clicking on it and choosing **Rename** from the shortcut menu:



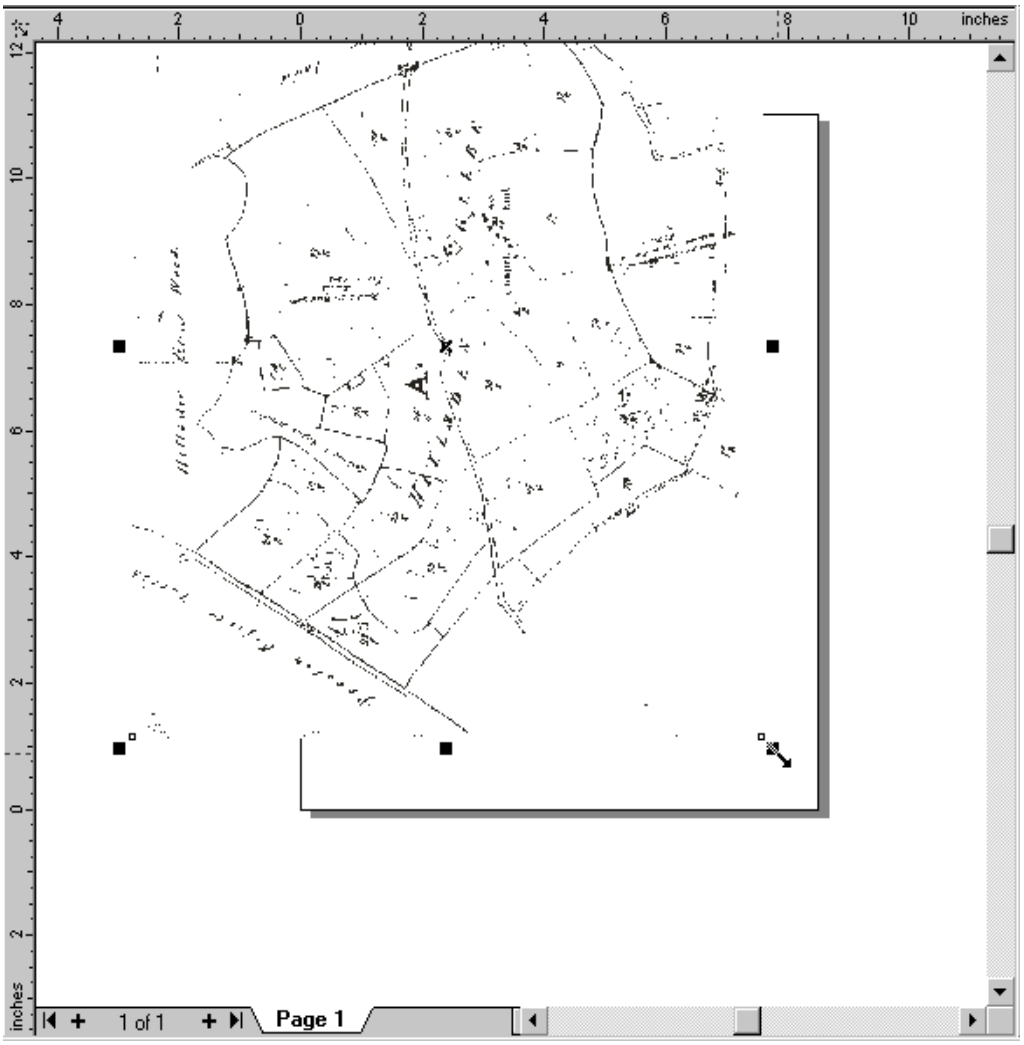
You have now added the layers you need to contain all the elements of your map.

The eye symbol and the printer symbol next to each layer name control whether the layer is visible on the drawing, and whether it can be printed. Click on the symbol to disable/enable. The symbol is greyed out to show when the layer is invisible and/or not printable.

Importing the Map

The map we are producing is based on an 1843 map of the glebe lands of Hillesden, Bucks. We have scanned the map and saved it in the file glebe_map.gif. You will import this into layer 1 of your drawing and trace on top of it.

- Click on the glebe map layer in the object manager to make it the 'current layer' (the name appears in red).
- Choose **File ► Import…**, and in the browse dialog box that opens navigate to your tutorial directory and select glebe_map.gif. Click **Import**. The map appears in your drawing, but is much too big, so you need to resize it.
- Left-click on the map and drag it across your drawing until you can see one of the corner markers. Left-click on the corner marker, the mouse-pointer changes to a double-headed arrow, drag it to resize the map so it fits in the printable page.

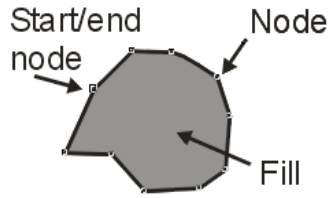


You are now ready to start drawing your map. We'll start with the field boundaries.

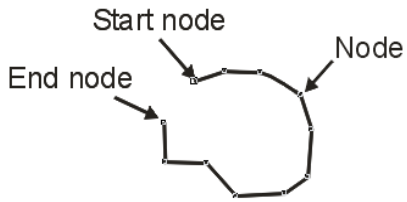
Drawing in the Field Boundaries

To draw in the field boundaries you are going to use the bezier drawing tool. Using this is like putting an outline on a map using string and pins. Every time you left-click the mouse it's like putting another pin in and your 'string' can change direction. Putting lots of 'pins' in allows you to follow quite tight curves (the official CorelDRAW name for these 'pins' is 'nodes').

If you join your first node to your last node, Corel recognizes this as an 'object' and you can fill it:



If you don't join the beginning to the end you will have a 'line' rather than an object and you won't be able to fill it:



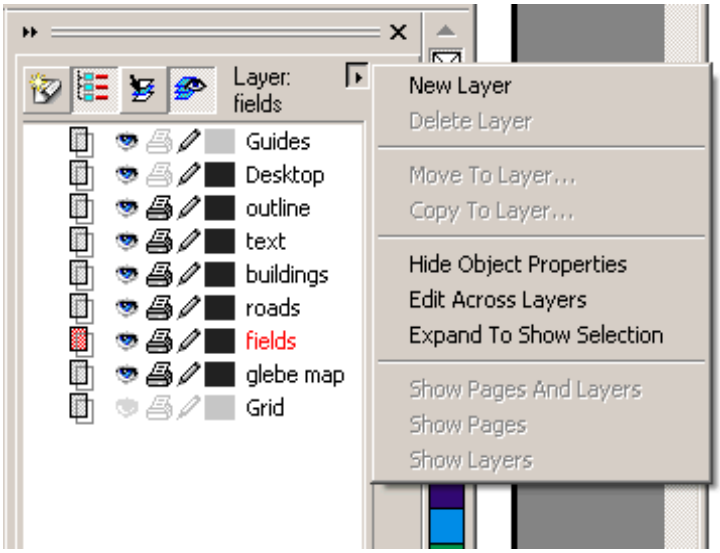
We are going to fill some off the fields with patterns to illustrate arable usage, so you'll need to make sure you are joining your beginning to your end!

The first thing to do is make sure you're on the right layer:

- Click on the fields layer in the object manager to make it the 'current layer' (the name appears in red).

You need to make sure that you don't accidentally select the underlying glebe map while you're tracing it. To do this:

- Click on the arrow in the top right hand corner of the Object Editor so that a shortcut menu appears, and make sure that Edit Across Layers is disabled, i.e. does not have a tick against it. (CorelDRAW can sometimes mysteriously re-enable Edit Across Layers, so it is worth checking this from time to time, especially if something unexpected happens).

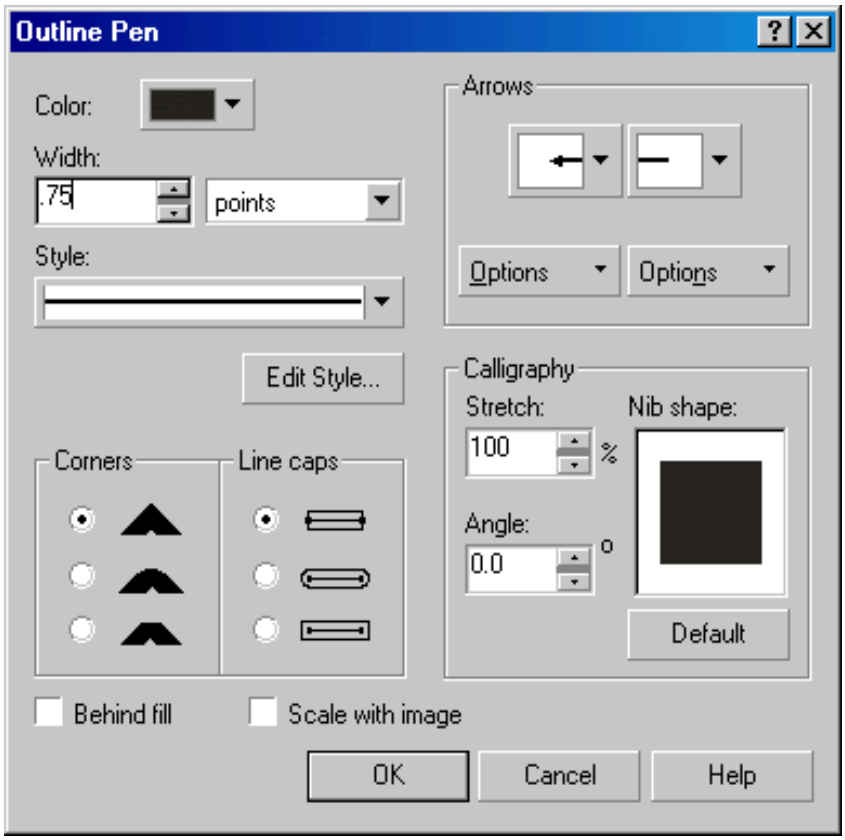


Now you're ready to start tracing:

- Select the bezier drawing tool from the tool box. You have told Corel you want to draw a line, now you need to say what thickness and colour the line should be.

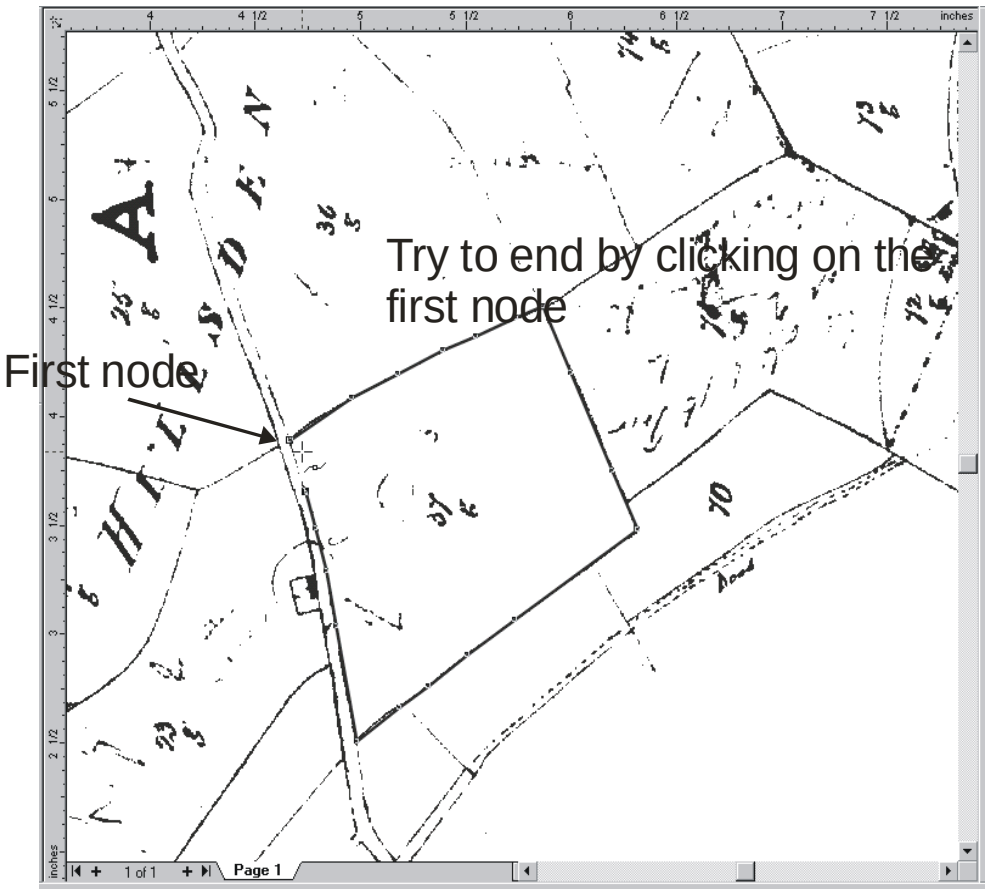
- Open the Outline tool flyout from the tool box:

- Click on the pen tool icon on the left of the flyout . A dialog box asks you what you want to apply new settings to. 'Graphic' is selected by default, which is what you want, so click **OK**. The **Outline Pen** dialog box opens:



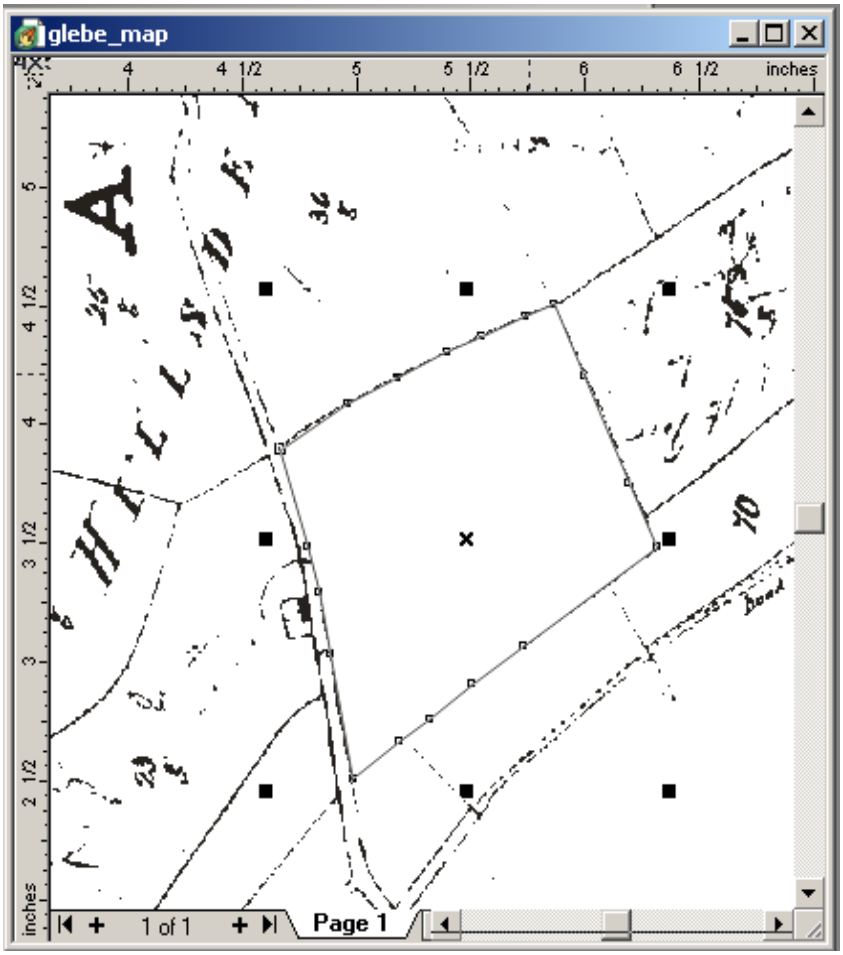
- Make sure the colour is set to black.
- Set the width to .75 points (if 'points' isn't the current unit of measurement, select it from the drop down list next to the **Width** box).
- Click **OK** to accept these settings.

Move the mouse pointer over the glebe map and start clicking and dragging, following the outline of a field boundary. Try to finish by clicking on the starting node (always shown by a slightly larger box). You'll know when you've done this correctly because a larger black box will appear where the two nodes have joined.



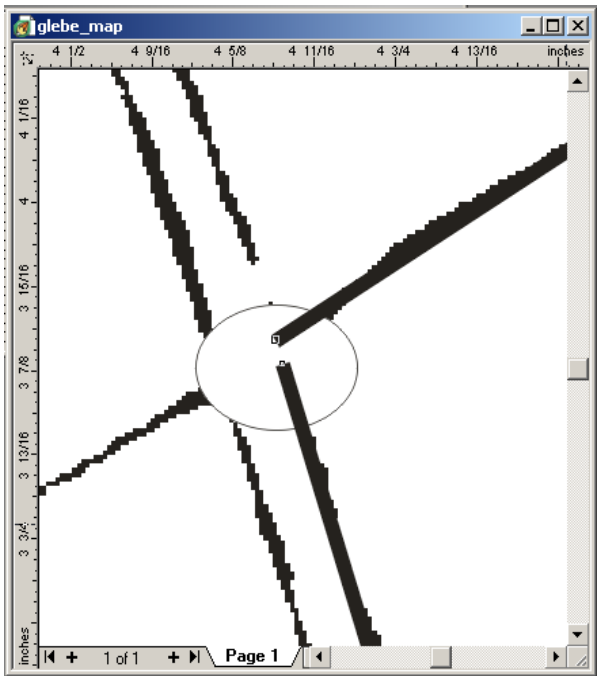
Without clicking on the map again, move your mouse pointer over to the tool box and click on the pick tool. This deselects the bezier drawing tool.

Click on the field boundary you have just drawn on the map. A box appears around it to show that it has been selected. Click on the white box in the palette. Your field should fill with white, obscuring the map behind:



If your field doesn't fill, it means you haven't successfully created an object by attaching the first node to the last. This can be easily fixed:

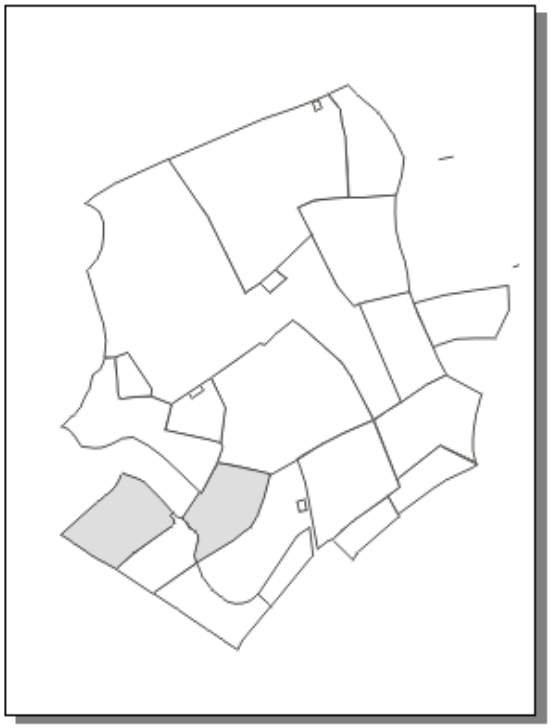
- Zoom in on your field boundary so that you can clearly see the individual nodes in your bezier line. You should be able to see a gap between the first node and the last:



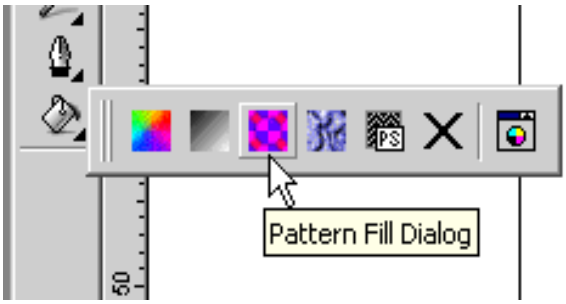
- Select the Shape tool from the tool box . Click on your field boundary to select it then click on one of the unjoined nodes. Simply drag it over the other node and your line will become an object and you can fill it. (You can also use the shape tool to add extra nodes or delete existing nodes from anywhere on your bezier line.)

- Carry on tracing field boundaries on the map. At any time you can make the map you are tracing invisible to get a better idea of what your tracing looks like. Simply click on the eye icon next to the glebe map layer to make the original map invisible. Click on the eye icon again to make it visible once more.

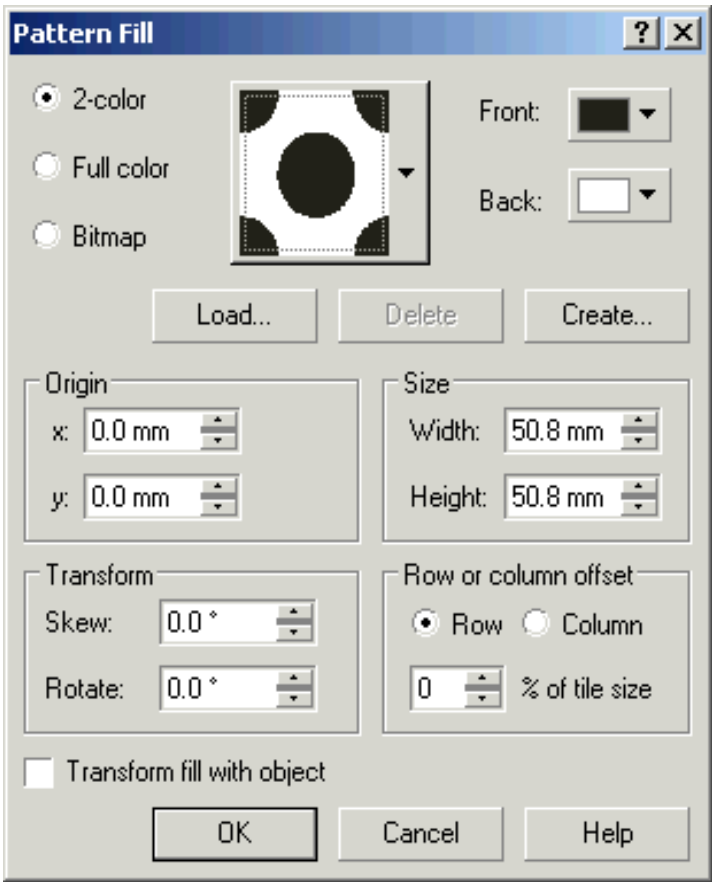
When you've added all the field boundaries, you need to add grey shading to two of them to indicate they are arable fields. Select each field and click a grey in the palette (lighter greys work best).



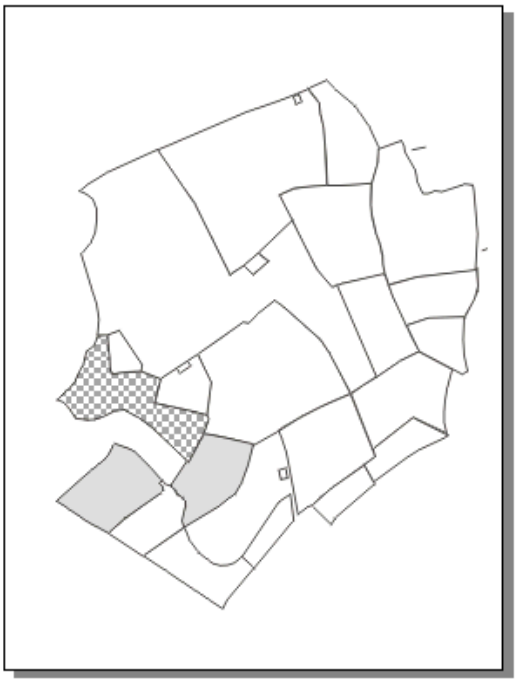
We also want to fill the field identified as a spinney with a pattern. The method of doing this is different. Click on the spinney outline to select it, then click on the Fill tool in the tool box so that the flyout appears:



Click on the Pattern Fill icon . The Pattern Fill dialog box appears:



We are going to use the default polka-dot pattern (you can choose other patterns by clicking on the down arrow next to the pattern) We want the dot to be grey rather than black, so click on the down arrow next to the Front colour box and choose a grey from the drop-down palette. We want the dots to be quite small, so enter a width and height of 5mm. Click **OK**. The spinney is filled with a polka dot pattern:



Sometimes, when you incorporate a CorelDRAW map into a Microsoft Word document, a pattern fill won't print properly. You need to experiment with different fills to find ones that work.

With all the field boundaries drawn in and the ones that need filling filled, you are ready to draw the roads and tracks in.

Adding Roads and Tracks

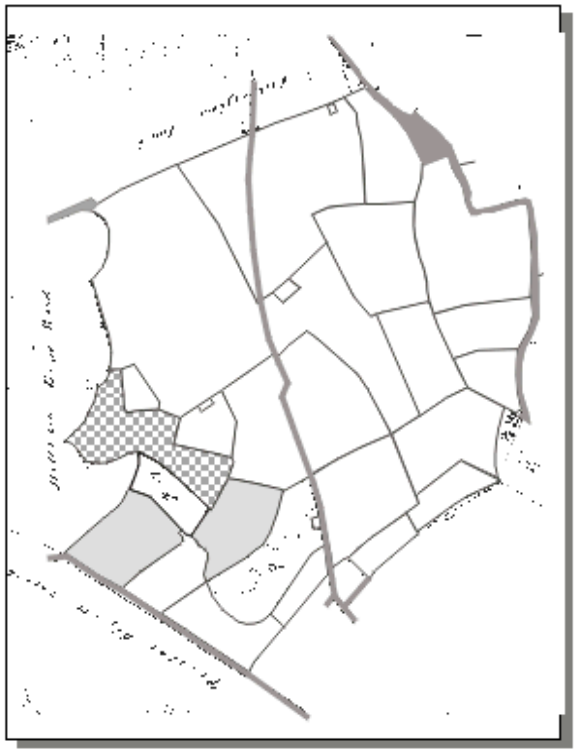
To draw in the roads and tracks, you are going to use the bezier drawing tool again, but this time you are going to draw with a thick grey line rather than a thin black one.

- Click on the roads layer to select it.
- Open the Outline Pen dialog box. Choose a grey colour and a line width of 5 points.
- Click the bezier tool in the tool box.
- Point and click to draw over the fairly straight roads in the middle and at the bottom of the map.

The roads on the right of the map and on the top left are more irregular in shape and have ‘funnels’ leading onto the fields. To preserve these shapes we are going to draw these two roads in the same way as we drew the field boundaries.

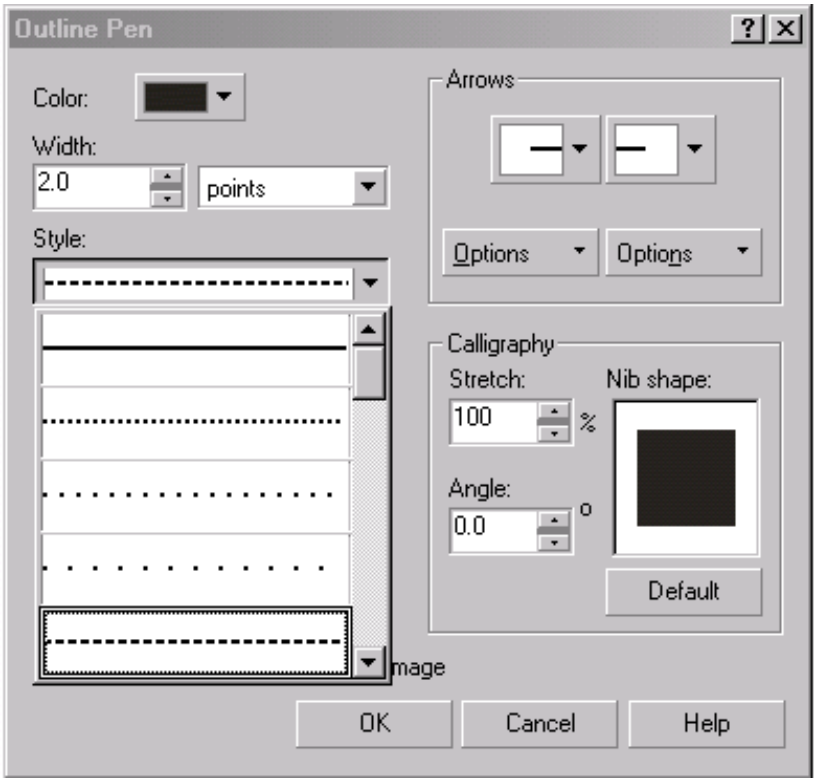
- Open the Outline Pen dialog and choose a grey line .75 points wide (choose the same grey as you used for the roads you have already drawn).
- Trace the shape of the roads like you did for the field boundaries, making sure to place your end node over your start node so you have a fillable shape.

- Fill the road shapes with the same colour grey as the outline:

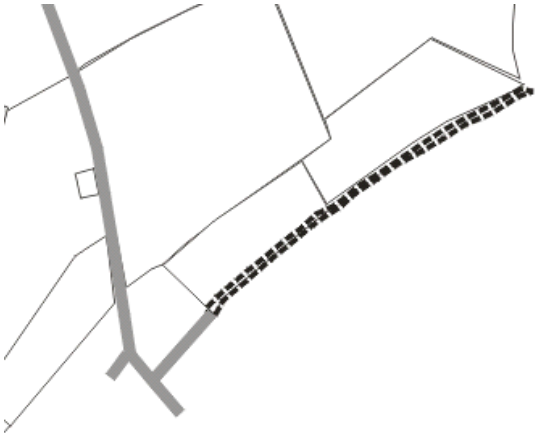


Next we are going to add the track and footpath represented by dotted lines at the bottom right of the map.

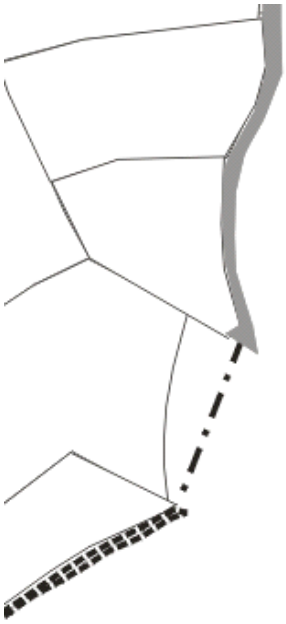
- Using the bezier tool, trace over the double dotted lines representing the track.
- We are now going to convert the solid line to a dotted one, with the track object selected, open the Outline Pen dialog box. Set the width to 2 points, choose a dotted line from the Style drop-down list, and click **OK**.



The track now appears as a dotted line in the map. Note that choosing line properties while you have an object selected only affects that object – any new objects you draw are unaffected.



Repeat this process to draw in the path, only this time select a dot-dash line pattern:

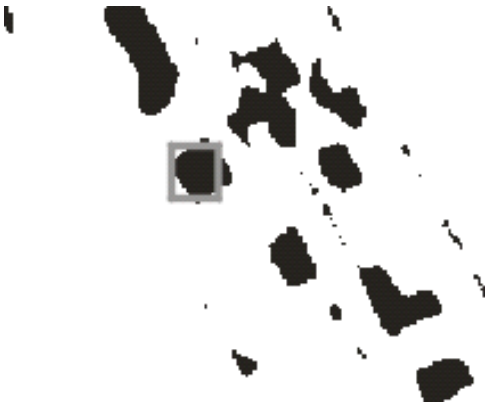


You have added the roads to your map, now you can draw in the buildings.

Drawing the Buildings

To draw in the buildings, you are going to use the rectangle tool to draw the simple shaped buildings and the bezier tool to draw in the more complex ones.

- Click on the Buildings layer to select it.
- Open the Outline Pen dialog box and select a grey .5 line width.
- Select the Rectangle tool from the Tool Box.
- Make the field layer invisible so you can see all the buildings on the Glebe Map layer.
- On the map, zoom in on the Chapel End area and draw in a rectangle near one of the buildings.



You now need to rotate this rectangle so its orientation matches the building.

- Click on the rectangle once so that the select box appears, then click on it again, the select box changes to arrows.

- Hover the mouse pointer over one of the corners until the pointer changes to a circle, and then drag the mouse to rotate the box. Let it go when the orientation matches the underlying building. (You can use this method to rotate any objects in CorelDRAW.)

- Click on the same grey as the line colour in the palette to fill the building. Repeat this procedure to trace all the square and rectangular buildings.

- For the more irregular shapes use the bezier tool to trace the shapes (like you did for the irregular roads) and fill with grey.

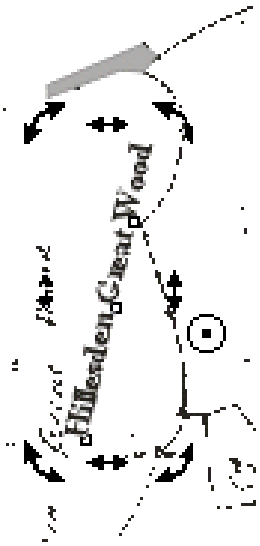
With the fields, roads and buildings added, you are now ready to annotate your map.

Adding Text

To add text to your map, you are going to use the text tool. This gives access to a wide range of different type styles, sizes, weights etc. To add your annotations:

- Click on the Text layer to select it.
- Click on the text tool in the tool box.
- In the text tool property bar, select font and size as follows:

- Add the labels ‘Buckingham Parish’ and ‘Preston Bisset Parish’.
- Add the label ‘Hillesden Great Wood’. This needs rotating so that it fits within the area of the wood. Select the text with the pick tool, then click on it again so the rotate handles appear, now rotate it as you did the buildings when you added them.



- Add the label ‘Chapel End’. This is rather large when compared to the settlement itself and needs shrinking. Select it with the pick tool and choose a 12 point font size from the property bar (you could equally well reduce the type size by dragging the select box as you did to shrink the glebe map when you imported it).
- Finally, you need to add the Map Title. This needs a larger, grander font. The example map uses Monotype Corsiva, 36 pt. If this is not available on your system, or you do not like it, you can choose an alternative font from the drop down list on the property bar.

The map is nearly finished now; all you need do is add a bounding box to make the overall map look neater.

Adding a Bounding Box

To add the bounding box, you are going to use the rectangle tool.

- Click on the Outline layer to select it.
- Select the rectangle tool from the tool box.
- Open the Outline Pen dialog box and select a black line with a .5 point width.
- Draw a rectangle over your map so that it contains it (make sure fill is turned off, or you will conceal the map).

Congratulations, you have finished your map.

Incorporating CorelDRAW images into Word Documents

You can print your map directly from CorelDRAW, but you may wish to incorporate it into a Microsoft Word document (the only disadvantage of this is that Word cannot cope with all of Corel's fill patterns).

The easiest way to incorporate your map is:

- Make the glebe map layer invisible and unprintable (i.e. deselect the eye and printer icons next to the layer name).
- Reenable Edit Across All Layers.
- Select all the objects in the map by pressing CTRL-A.
- Select **Edit ► Copy** to copy all the objects.
- Open your Word document, go to the place where you want to insert the map and select **Edit ► Paste**. The map is pasted into your Word document where you can resize it if required.

If you subsequently want to make small adjustments to your map, double-click on it, and CorelDraw controls will appear enabling you to edit it in situ.

An alternative way to incorporate your map is:

- Make the glebe map layer invisible and unprintable (i.e. deselect the eye and printer icons next to the layer name).
- Choose **File ► Export** and export the file to a graphics format such as .GIF, .JPG or .BMP.
- Open your word document, go to the place where you want to insert the map and select **Insert ► Picture ► From File…**, and then select the file you exported your map to. The map appears in your Word document where you can resize it if required.

If you subsequently want to make changes to your map, you will have to edit it in CorelDRAW, re-export it, and import it into Word afresh.

GenMap

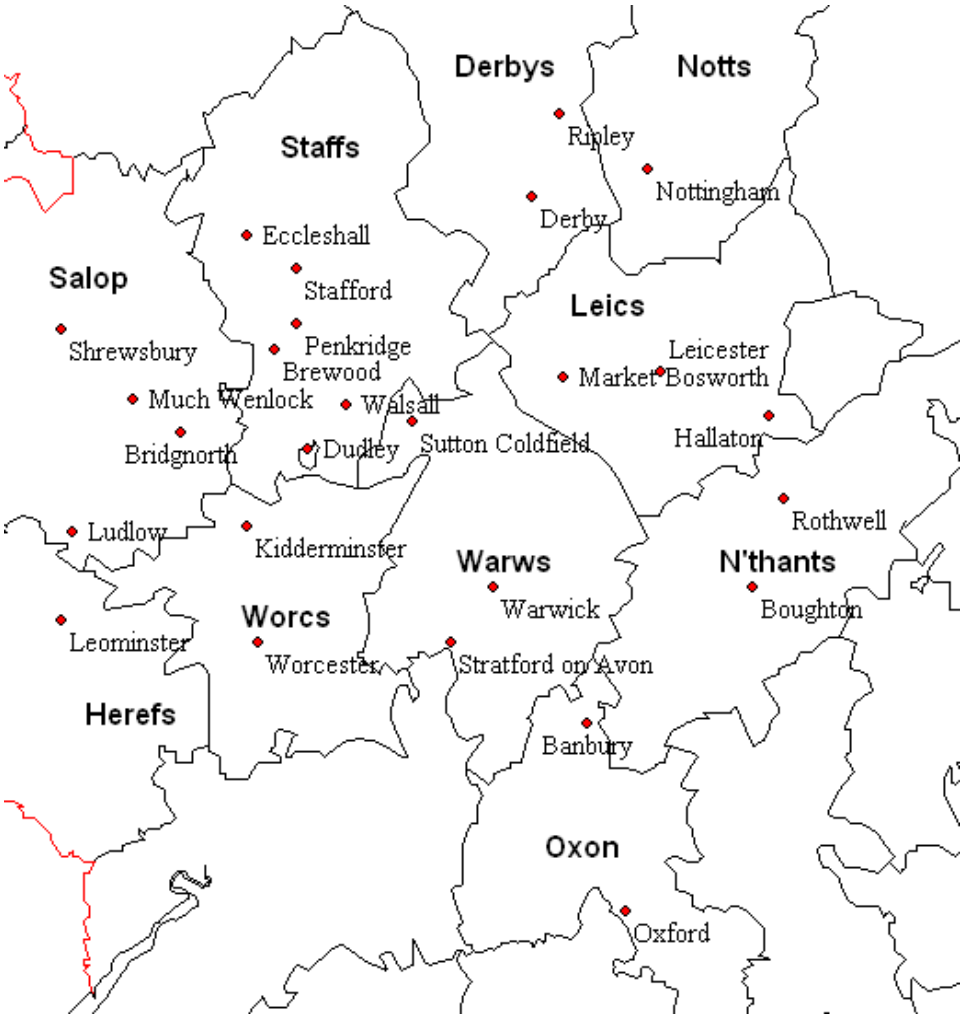
The aim of this section is to introduce you to GenMap. GenMap is a program aimed at family historians, and has several features that are useful to local historians too. It provides you with maps of the British Isles and its counties (pre-1974). It also has a gazetteer listing towns and villages in the British Isles and can locate these on the map for you. You can add your own locations to the gazetteer, supplying OS grid reference to locate them.

You can purchase GenMap for £29.95 from www.archersoftware.co.uk. Full installation instructions come with the CD.

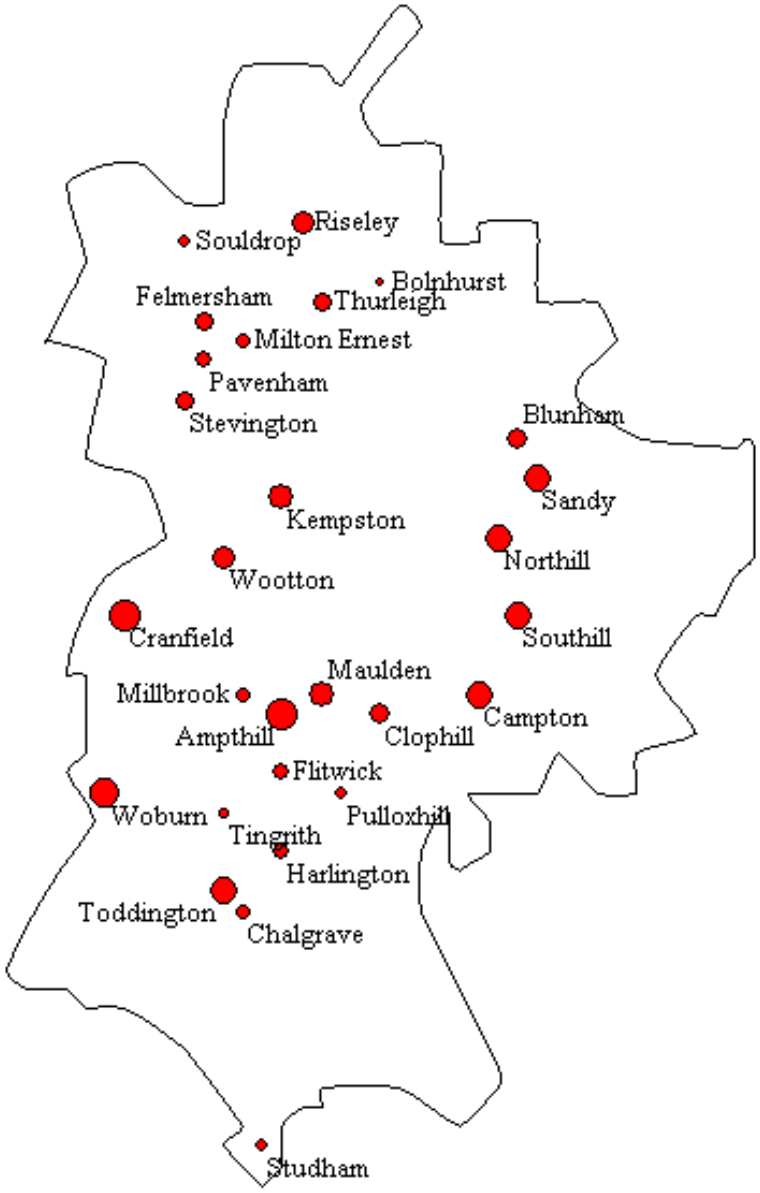
How can you use GenMap?

- You can produce maps of the British Isles or England, Scotland, Wales or Ireland in isolation, with locations marked on them and annotated.
- You can produce a map of an individual county with locations marked and annotated.
- You can use different sizes and shapes of symbols on your map to show quantitative information.
- You can include the maps you have produced in GenMap into Word Processor documents, or you could import a GenMap image into CorelDRAW to serve as a basis for a more complex map.

This tutorial takes you through two exercises. The first gets you to plot the location of horse fairs in the Midlands for which toll books survive. You start with a map of England, but the finished map homes in on the counties of interest:



The second exercise demonstrates GenMap's distribution map capabilities. It compares the average number of baptisms per year over the decade 1700-1709 for parishes in Bedfordshire.


Riseley
Souldrop
Bolnhurst
Felmersham
Thurleigh
Milton Ernest
Pavenham
Stevington
Blunham
Sandy
Kempston
Northill
Wootton
Cranfield
Southill
Maulden
Millbrook
Campton
Ampthill
Clophill
Flitwick
Woburn
Pulloxhill
Tingrith
Harlington
Toddington
Chalgrave
Studham

GenMap Basic Concepts

Like CorelDRAW and other PC packages, GenMap also offers many ways of achieving the same thing (via main menu, toolbar, shortcut menu etc.). Again, we will show you one way, when you're confident you can explore and choose the methods which best suit you.

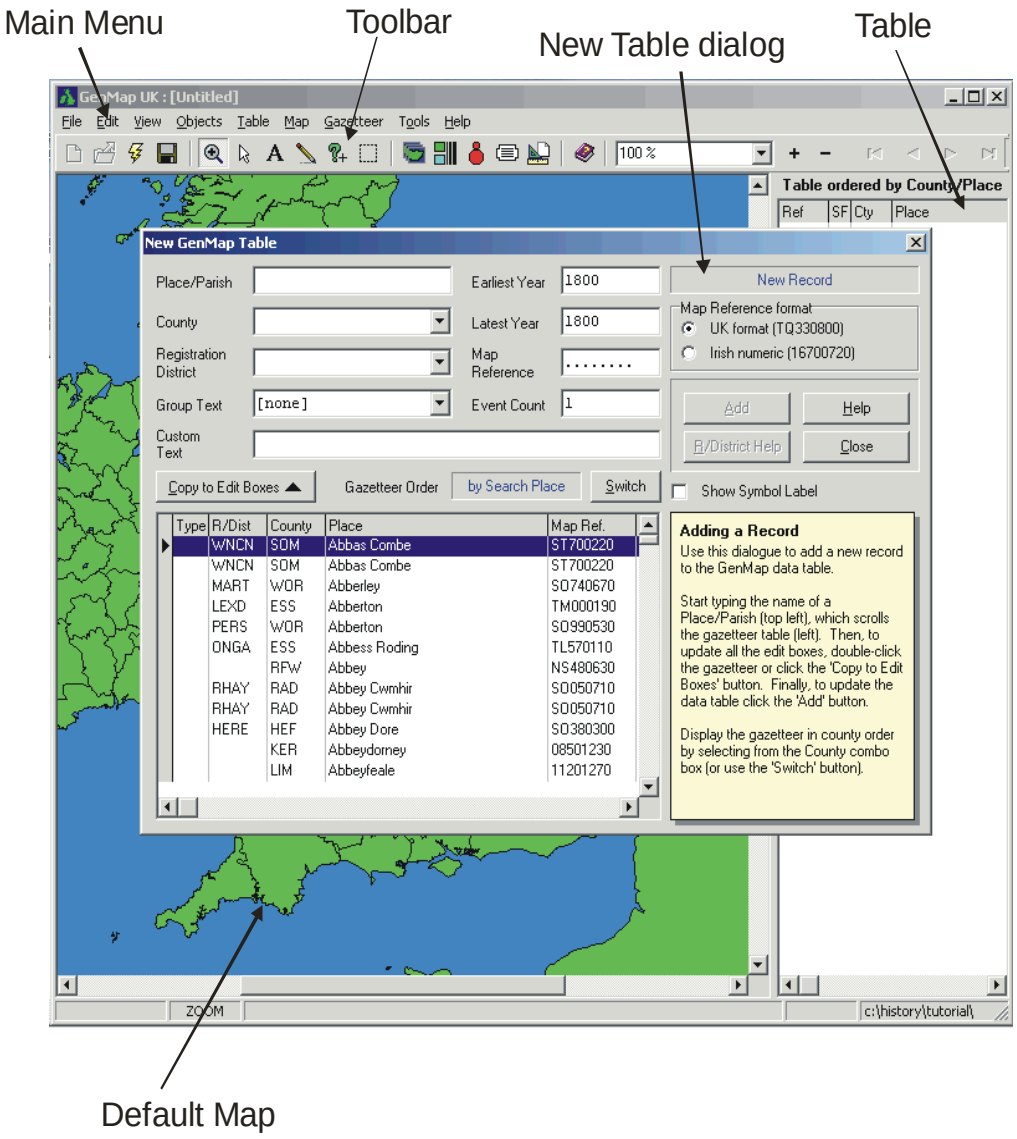
Tables and Maps

Each GenMap document you create comprises a table and a map. The table is a small database holding the geographical information you have entered. The map is where the information is graphically plotted. Each part of the document has a separate existence and is manipulated separately within GenMap. In this tutorial we are most interested in what use can be made of the map, but it is worth noting that you can also export the table into a database or spreadsheet format.

You enter data into the table, and GenMap plots it on the map for you. You can add a title to the map and your own text labels if required. You can also change the appearance of the map, by changing colours, text fonts and symbol shapes and colours.

Quick Tour of GenMap

Start GenMap by choosing **Start ► Programs ► Family History ► GenMap UK**. The first thing you need to do is open a new document by choosing **File ► New** from GenMap's main menu. GenMap opens a default map and the New GenMap table dialog box to let you start creating a map. This is what GenMap looks like:



Main Menu

As is usual with Windows programs, the main menu bar gives you access to all the features of GenMap. The menus of principal interest are:

- **Object**. Allows you to control the text displayed on your map and add arrows.
- **Table**. Allows you to edit the table part of your document.
- **Map**. Allows you to edit the map part of your document.
- **Gazetteer**. Allows you to edit the gazetteer (the database that holds location details within GenMap).

Toolbar

The Toolbar provides a quick way of editing a GenMap document map and table.

The tools above the map allow you to edit various features of the map. The tools on the right above the table allow you to move through and edit the table.

Hover the mouse pointer above the individual toolbars to be shown the name of each tool.

New Table Dialog

This is displayed whenever you create a new document in GenMap and is your starting point. It allows you to select locations from the gazetteer, or enter your own locations, and add additional information about each location. When you have added the required information, GenMap plots it on the map part of the document.

Map

When you open a new document, GenMap shows the default map. This shows the British Isles and northern France. You can customize this after you have finished with the **New Table** dialog.

Table

This is initially empty when you open a new document. It is filled in from the information you provide in the **New Table** dialog.

Drawing the Horse Fair Map

Having installed GenMap and become familiar with its basic features, you are now ready to start drawing your first map, the one that shows the location of surviving horse fair toll books in the Midlands. The process is divided into the following steps:

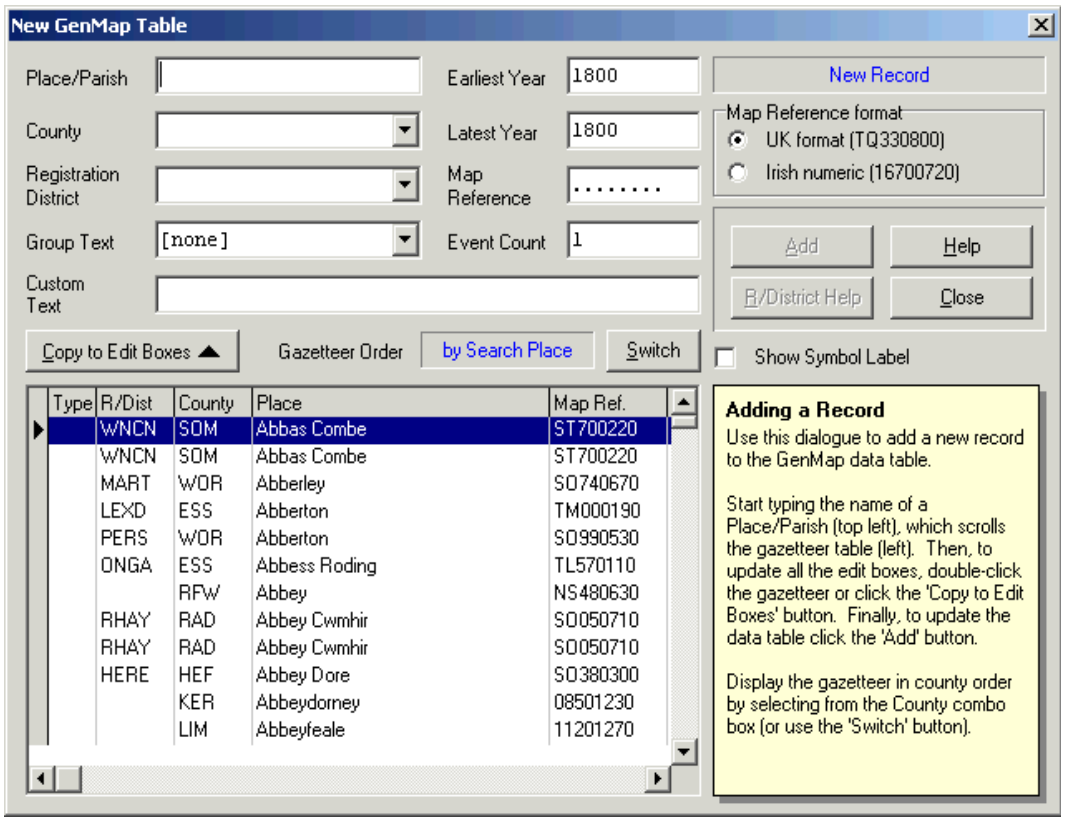
1. Select the locations of the horse fairs from the Gazetteer and add them to the table for your document.
2. Zoom in on the map so it just shows Midlands counties where the information is plotted.

3. Customize the map so it is suitable to import into a word processor document.

Add Locations to the Table

If you haven't already opened a new GenMap document, open one now (use **File > New** or click on the New icon in the toolbar). Save it into a tutorial folder with a recognizable name. The file will have the suffix .GMP. SAVE YOUR FILE OFTEN. The quickest way to do this is to press CTRL-S.

When the new document opens, the **New Table** dialog box will open too. This is where you add the information that you want to plot on the map.



Here is a list of the locations that you want to add:

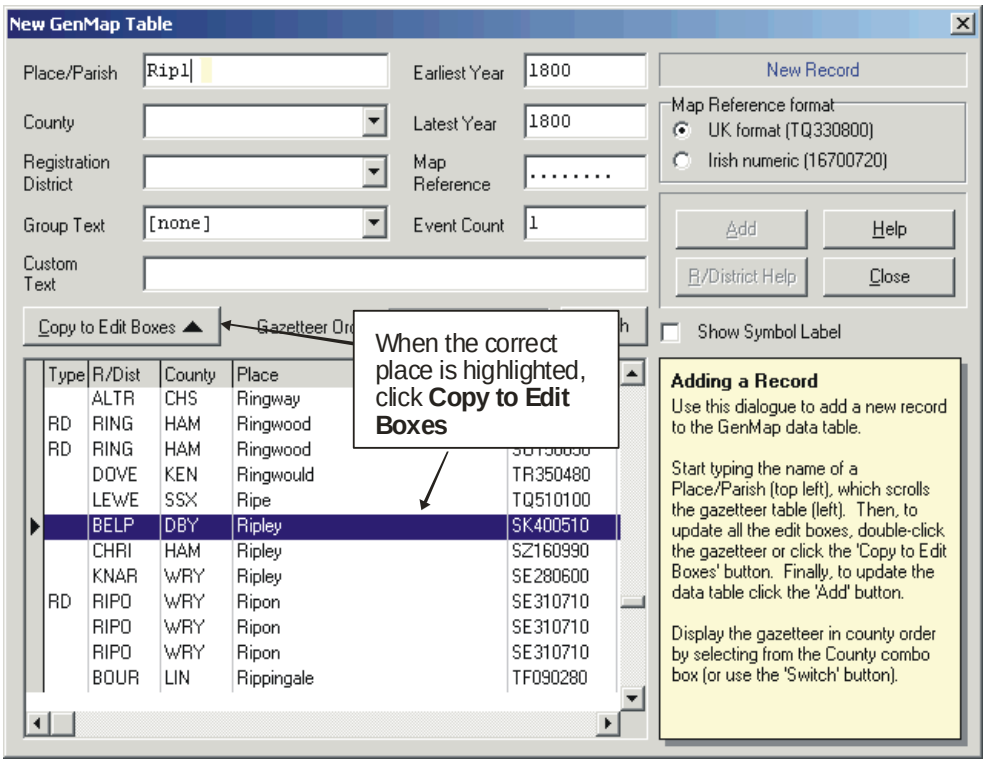
- Ripley (Derbys)
- Derby (Derbys)
- Nottingham (Notts)
- Eccleshall (Staffs)

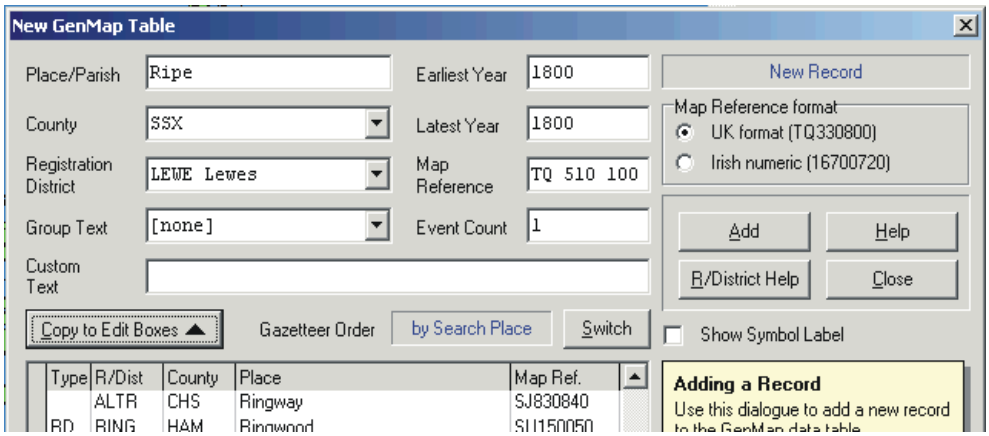
- Stafford (Staffs)
- Penkridge (Staffs)
- Brewood (Staffs)
- Walsall (Staffs)
- Shrewsbury (Salop)
- Much Wenlock (Salop)
- Bridgnorth (Salop)
- Ludlow (Salop)
- Leicester (Leics)
- Market Bosworth (Leics)
- Hallaton (Leics)
- Dudley (Worcs)
- Kidderminster (Worcs)
- Worcester (Worcs)
- Leominster (Herefs)
- Warwick (Warws)
- Stratford on Avon (Warws)
- Rothwell (N'hants)
- Boughton (N'hants)
- Banbury (Oxon)
- Oxford (Oxon)

It makes no difference in what order you enter the locations, but we will start at the beginning of the list:

In the **Place/Parish** field in the **New Table** dialog, start typing 'Ripley'. As you type, GenMap will try to match the location to one in the Gazetteer table part of the dialog box. 'Ripl' is enough to match to 'Ripley'. There are three places called Ripley in the Gazetteer, we

want the one in Derbyshire. Make sure this is highlighted in the Gazetteer table (you can move the highlighter up or down using the mouse if necessary) and when it is, click the **Copy to Edit Boxes** button. All the details from the Gazetteer are copied.

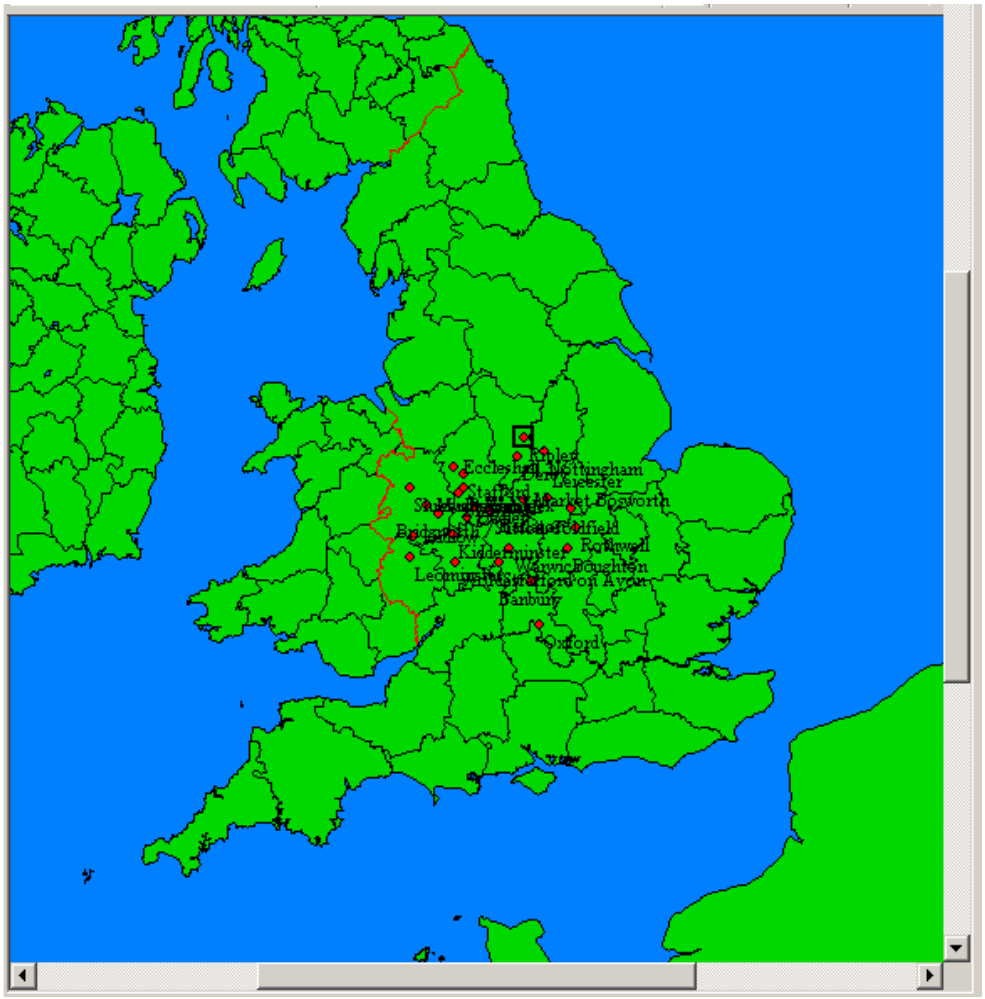




Click the **Show Symbol Label** check box to select it. This will cause GenMap to include the place name on the map.

Click **Add** to add Ripley to your map. The **New Table** dialog box clears ready for you to add your next entry. Repeat the process until you have added all the places in the list.

When you have added all the horse fairs locations, click **Close**. The **New Table** dialog box disappears and you can see the map beneath with all the horse fairs plotted on it.

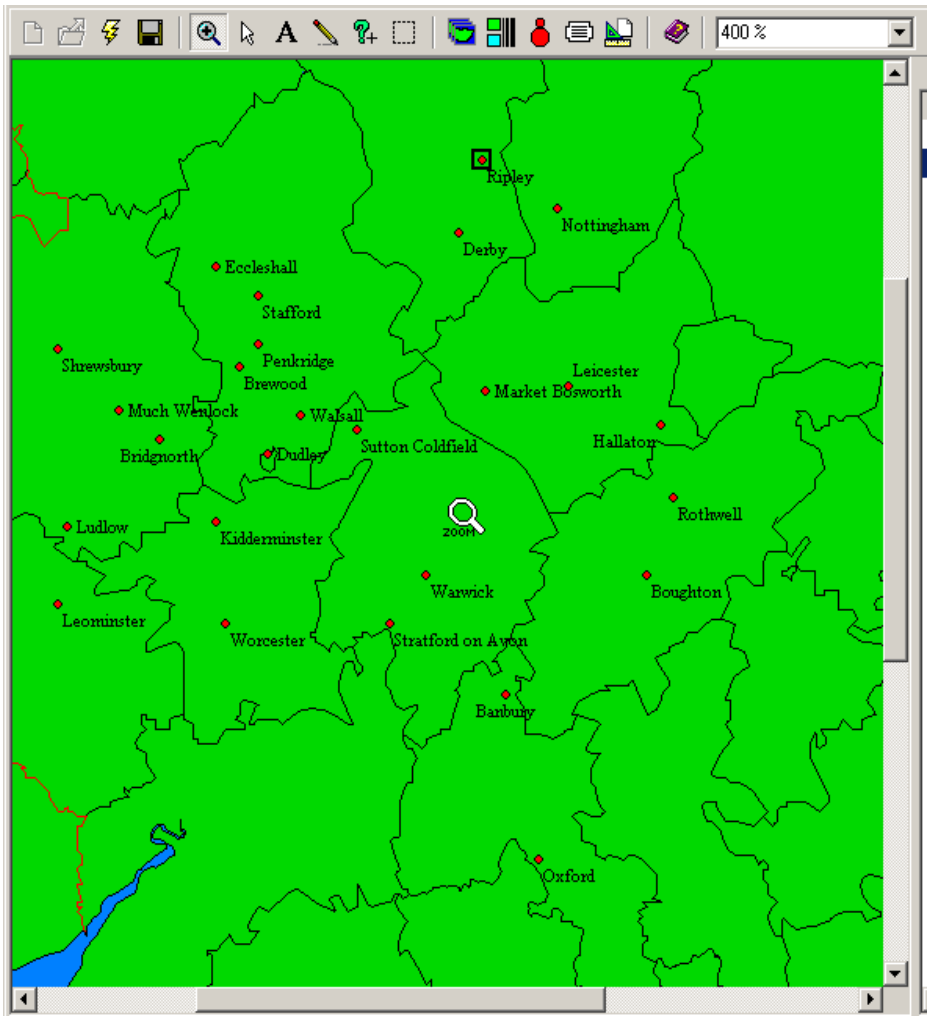


The map is not ideal as its stands. The locations are all bunched together and the text labels all overlap. The next section shows you how to format the map to meet your requirements.

Customize the Map

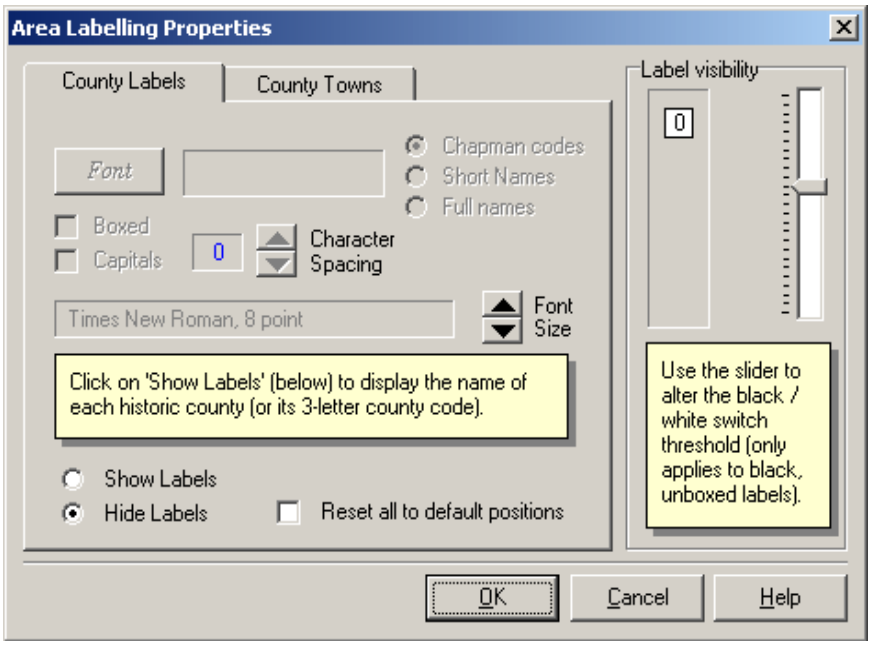
The first step is to zoom in on the Midland counties.

- Click the zoom tool in the GenMap toolbar . Position the zoom tool over the centre of the Midlands counties and click twice so that you are zoomed in 400%.



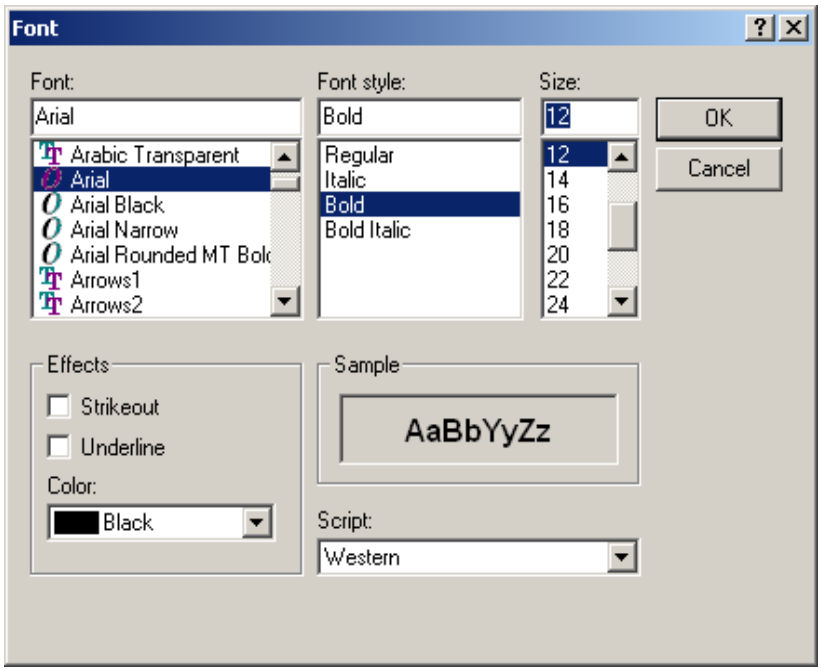
- Leicester and Market Bosworth still overlap, so choose the select tool in the toolbar , click on Market Bosworth and move it.

We want to label the counties in our map. Choose **Objects > Area Labelling…** from the main menu. The **Area Labelling** dialog box appears:



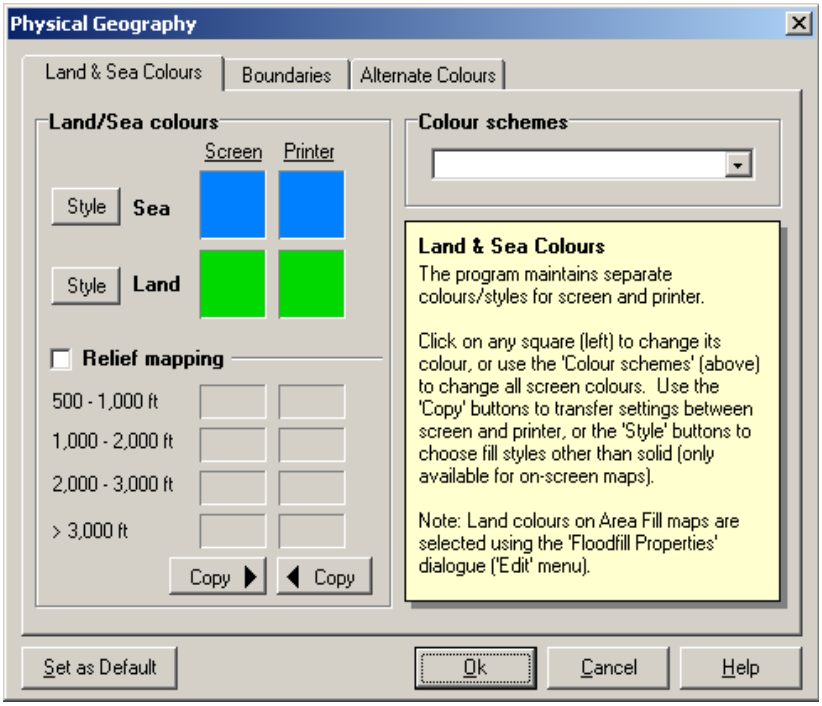
Click the **Show Labels** box to enable the dialog then choose the **Short Names** option.

Click on the **Font** button to open the **Font** dialog box:

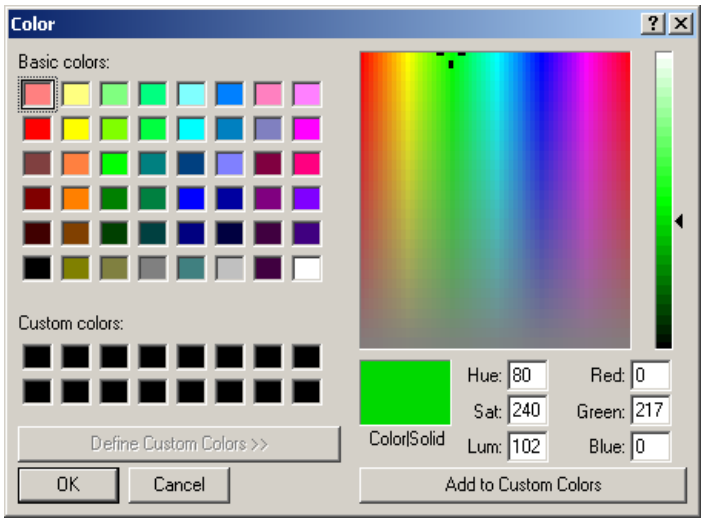


Choose the Arial font, bold, 12pt and click **OK**, then click **OK** in the **Area Labelling** dialog box. County labels appear in the map, but in some instances overlap with the horse fair locations. Once more you need to choose the select tool and select the county labels and drag them to better locations.

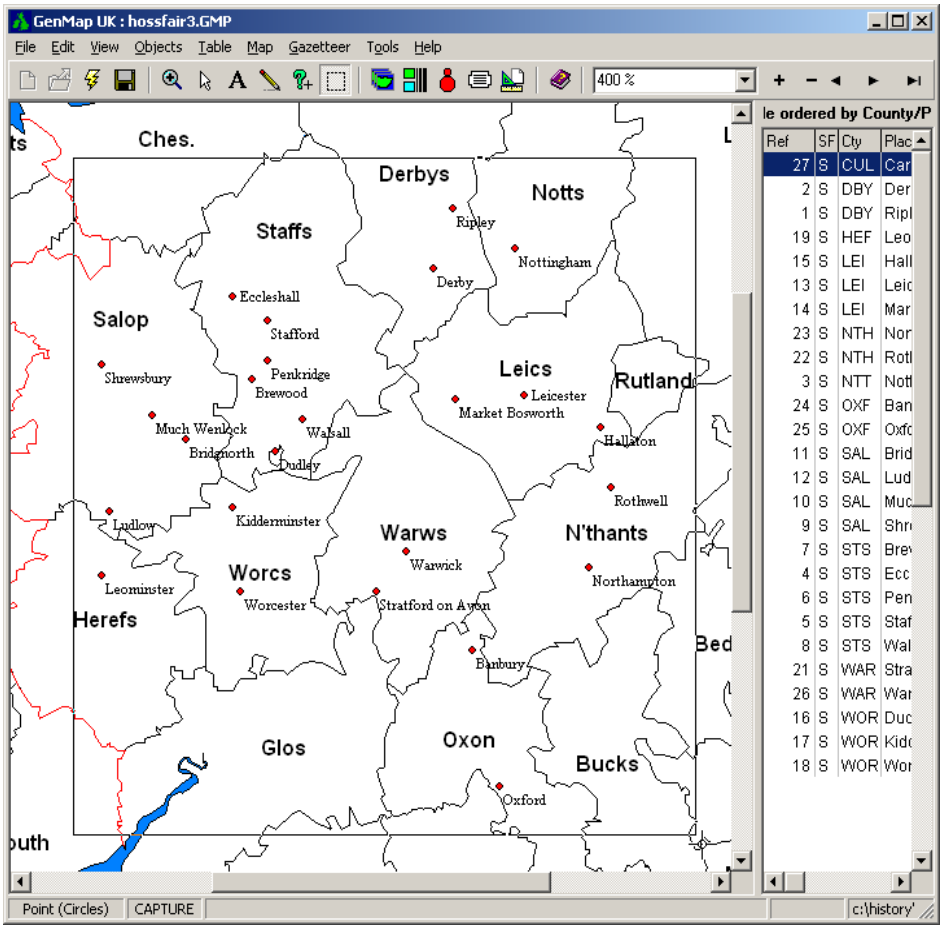
Next we want to convert the image to black and white to make it printer-friendly. Choose **Edit > Physical Geography** from the main menu. The **Physical Geography** dialog box appears:



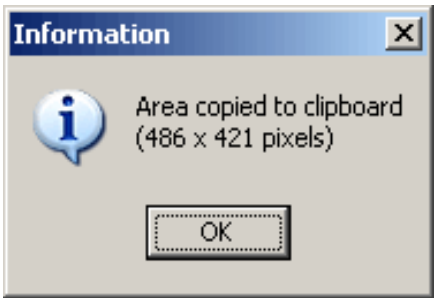
Because we are going to cut our map and paste it into a Microsoft Word document rather than print it directly from GenMap, we are going to change the Screen settings rather than the Printer settings. Click on the green square representing the land setting for the screen. The **Color** dialog box appears:



- Click on the white box in the bottom right of the palette, then click **OK**. The map appears in black and white and is ready to be cut and pasted into a word document.
- Click the Capture tool in the toolbar . The mouse cursor turns into a crosshair.
- Click and drag the mouse. A bounding box appears, position this so it encloses the locations on your map:



Choose **Edit > Copy to Clipboard**. A message box appears telling you the size of the captured image:



Click **OK**.

You can now paste the image into a Microsoft Word (or other word processor) document.

Drawing the Beds Baptisms Maps

Having successfully drawn your first GenMap map, you are now ready to draw a distribution map. The process is similar to drawing an ordinary map, except that you include the quantitative information when you add your locations to the table. You need to:

1. Enter the locations and data into the New Table dialog box.
2. Specify that you want the map to display only Bedfordshire.
3. Specify that you want the symbols to be proportional to the data.

Add Locations to the Table

Open a new GenMap document. Save it into a tutorial folder with a recognizable name. Remember to save your file often by pressing CTRL-S.

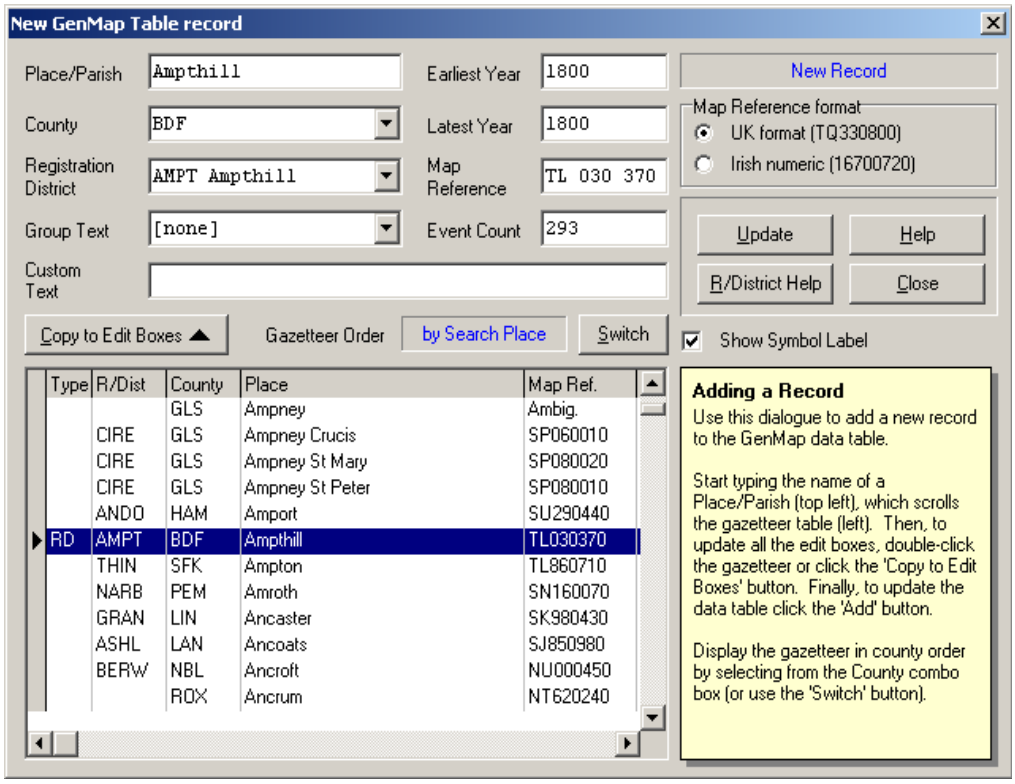
In the **New Table** dialog box you want to add to locations in Bedfordshire and the average number of baptisms. Here is the data you will be entering:

- Ampthill 293
- Blunham 137
- Bolnhurst 26
- Campton 222
- Chalgrave 65
- Clophill 140
- Cranfield 294
- Felmersham 110
- Flitwick 94
- Harlington 84
- Kempston 204
- Maulden 191
- Millbrook 69

- Milton Ernest 62
- Northill 223
- Pavenham 79
- Pulloxhill 52
- Riseley 173
- Sandy 248
- Souldrop 49
- Southill 233
- Stevington 122
- Studham 57
- Thurleigh 106
- Tingrith 40
- Toddington 252
- Woburn 290
- Wootton 182

Enter the data as follows:

- Select the location and click **Copy to Edit Boxes** just like you did for the horse fair map.
- In the **Event Count** field enter the average number of baptisms.

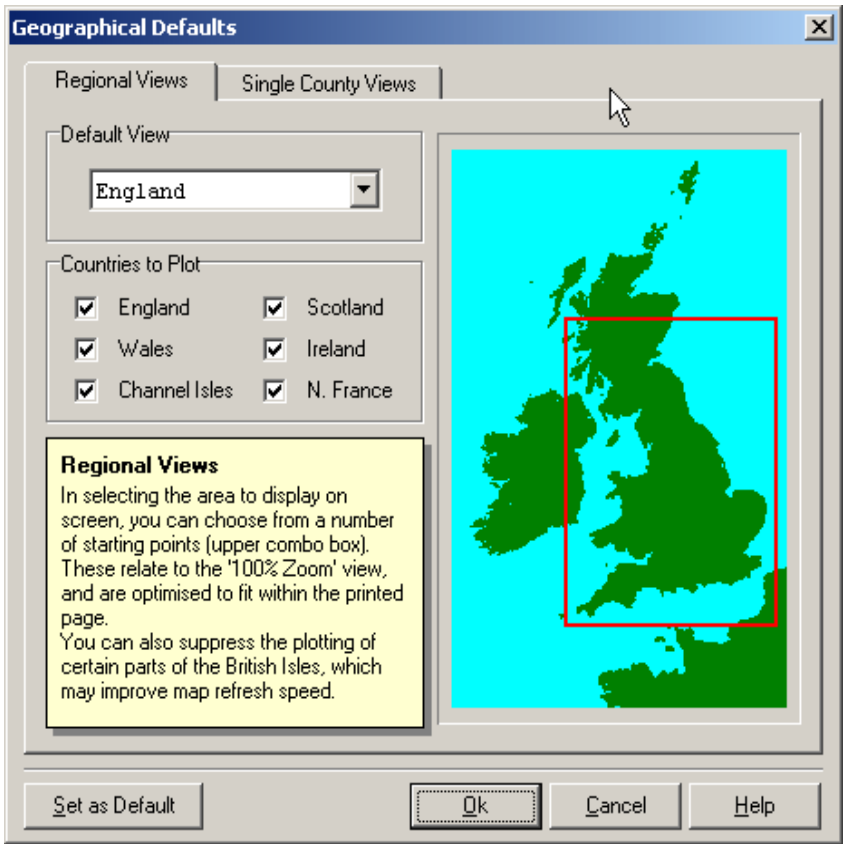


When you are done click **Close**. The map shows the Beds settlements tightly clustered in Bedfordshire. Clearly we need to do something to improve the presentation.

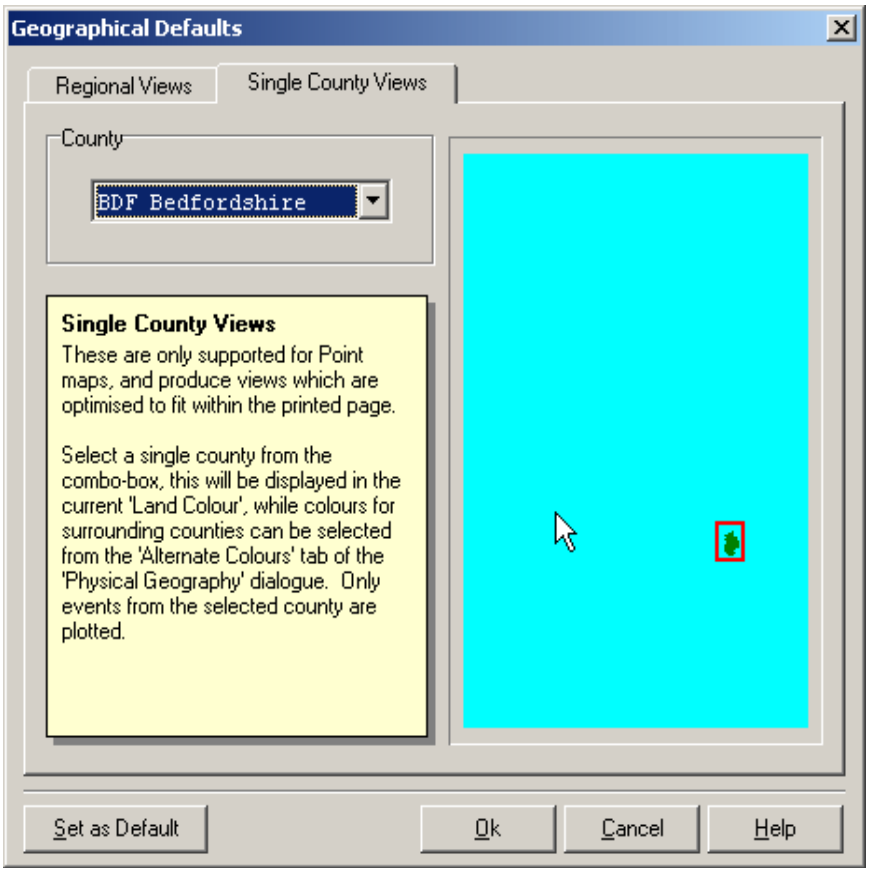
Display County View

The first thing to do is convert the map so that it shows only the county of Bedfordshire:

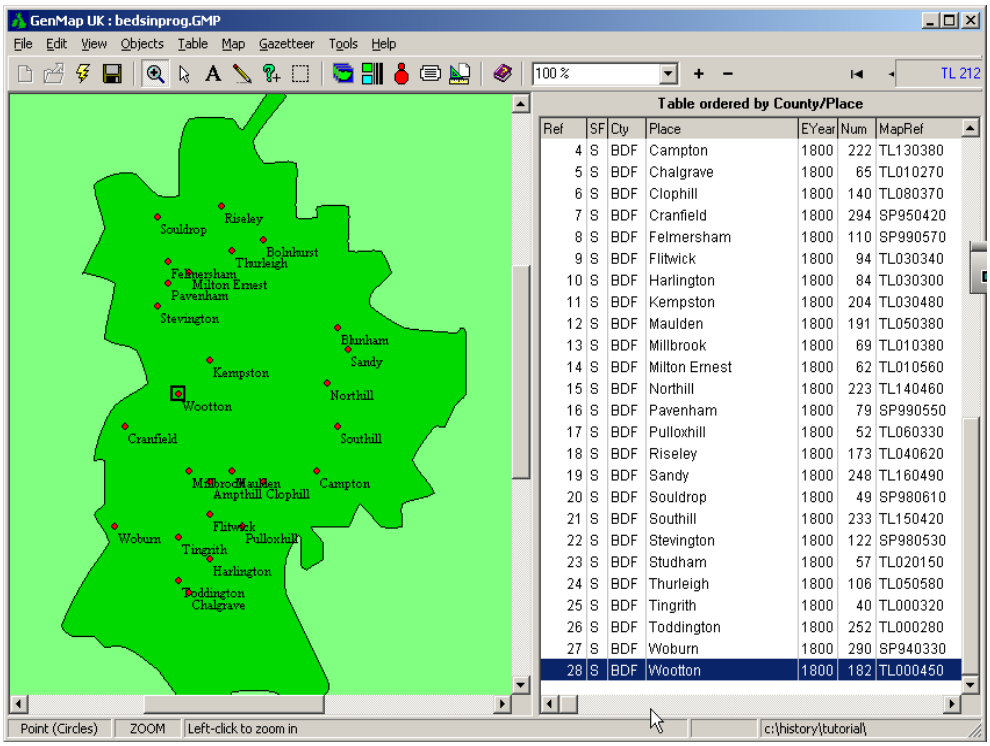
Choose **View > Geographical Defaults**. The **Geographical Defaults** dialog box appears.



Click on the **Single County Views** tab to bring that part of the dialog to the front and select Bedfordshire from the drop-down list of counties:



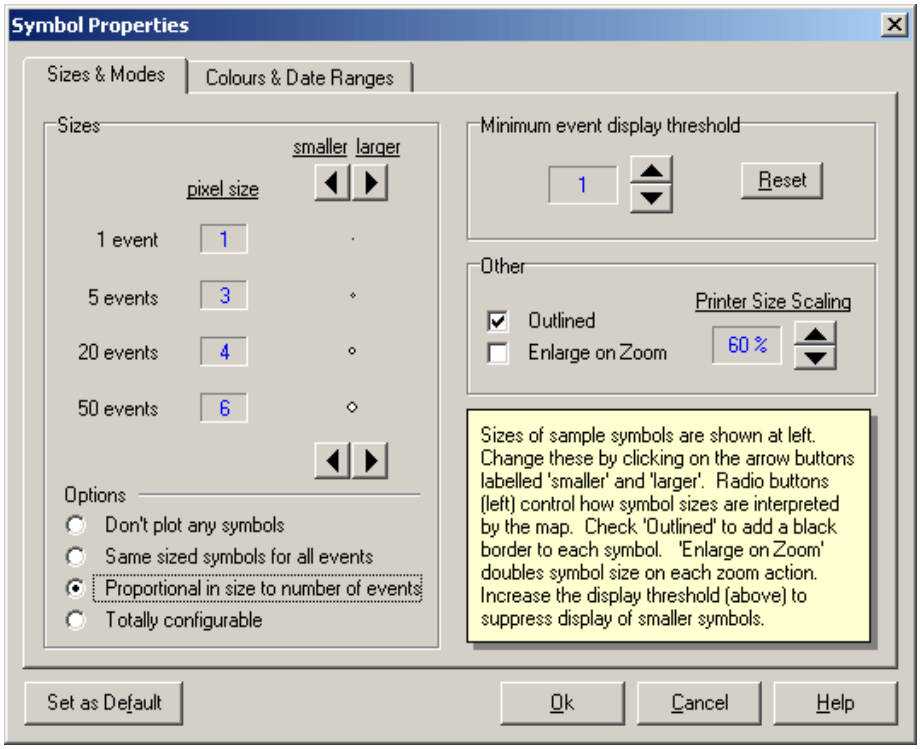
Click **OK**. The map now shows just our parishes in Bedfordshire:



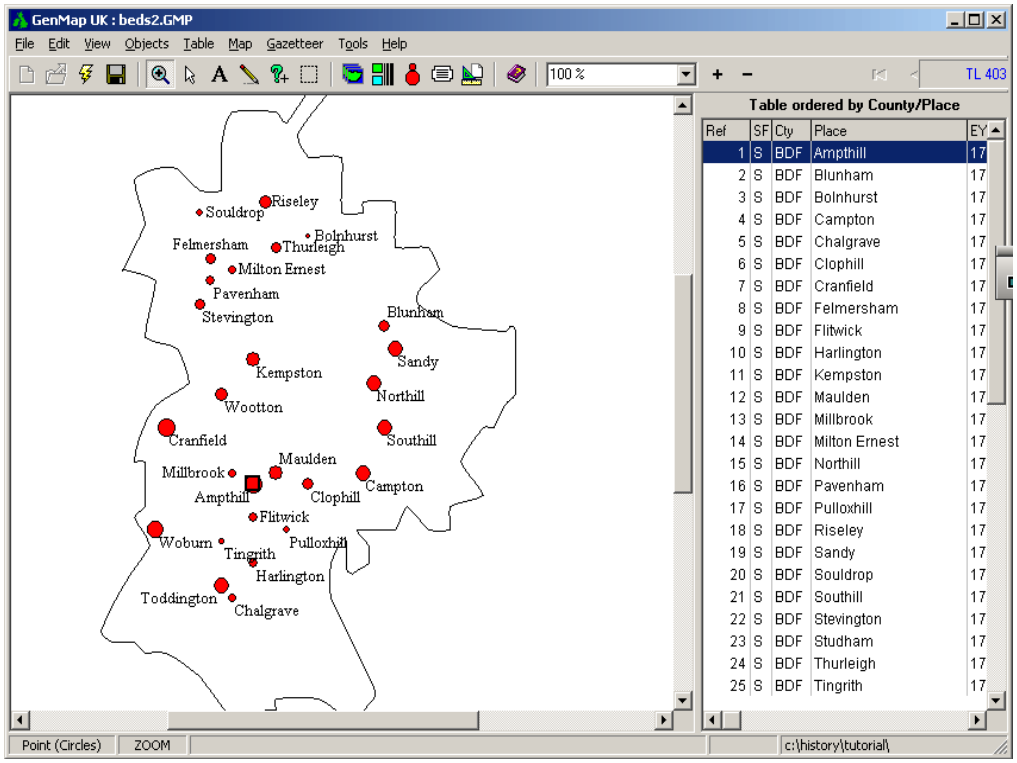
Use the techniques we used when plotting the horse fair locations to neaten up the text labels and convert the map to black and white. The final step is to convert the map so that the locational symbols are proportional to the average number of baptisms.

Making the Symbols Proportional

Choose **Edit > Symbol Properties**. The **Symbol Properties** dialog box appears. Select the **Proportional in size to the number of events** option:

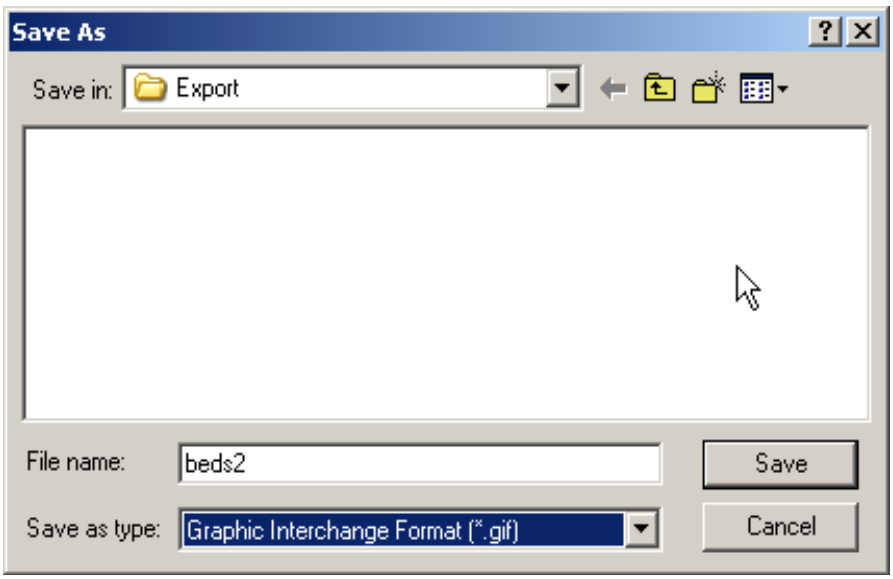


Click **OK**. The map is now displayed with the circles different sizes according to the average number of baptisms in that parish:



This time we are going to export the map as a .gif file. We could, if we wanted, then import into a graphics program like CorelDRAW to embellish it further. To export the map:

- Click the Capture tool in the toolbar . The mouse cursor turns into a crosshair.
- Click and drag the mouse. A bounding box appears, position this so it encloses the whole of Bedfordshire.
- Choose **File > Export > Export Map**. A **Save As** dialog box appears. Choose the gif format from the **Save as type** drop-down list. By default the file will be saved in the directory Program Files\GenMap UK\Export using the same filename as your GenMap document, but with a .gif suffix. You can choose a different location and filename if required.



You can now import the .gif file into CorelDRAW just like you did for the sample map supplied for the CorelDRAW part of this tutorial.